

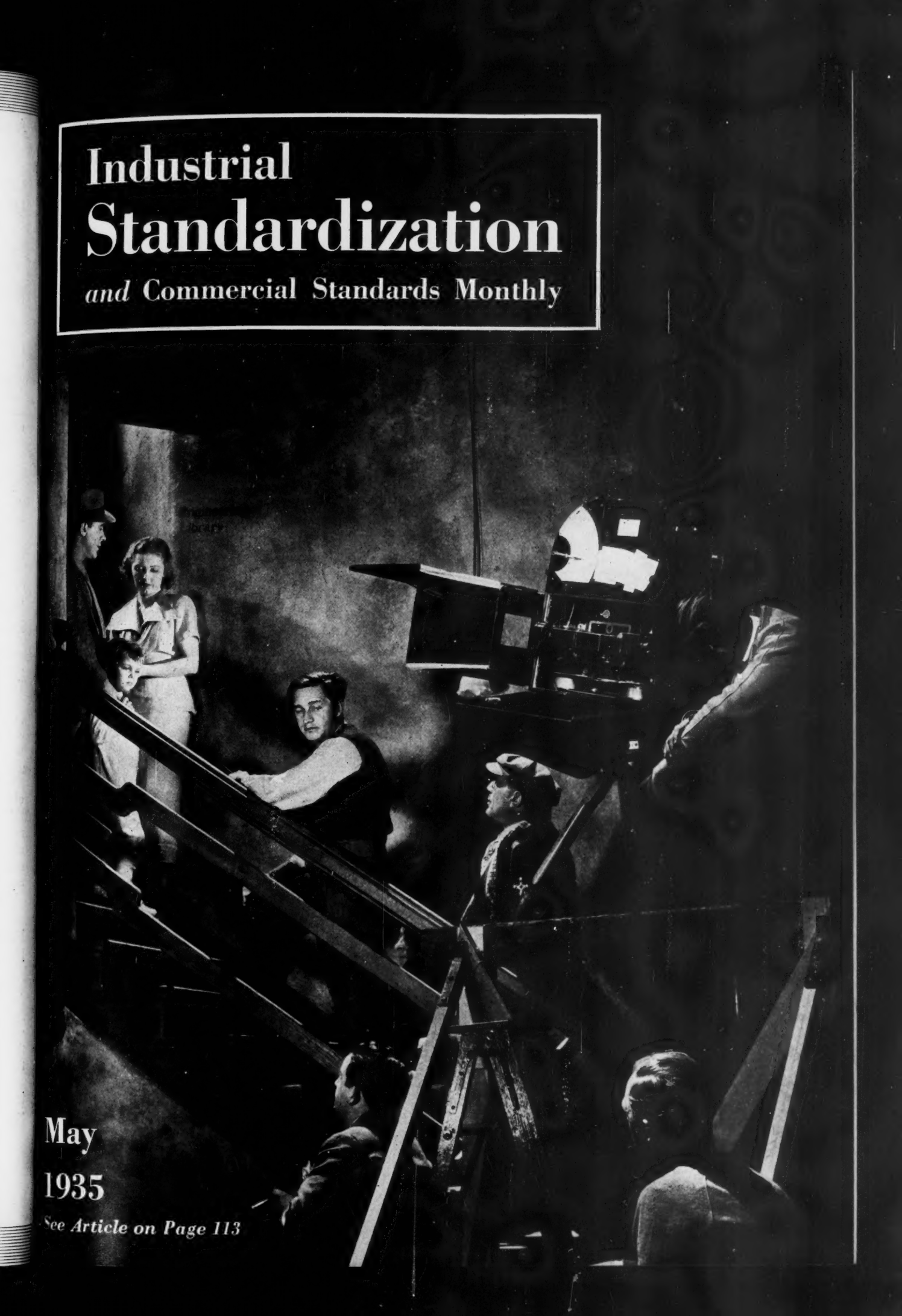
Industrial Standardization

and Commercial Standards Monthly

May

1935

See Article on Page 113



This Issue: Front Cover, Warner Bros. photo. Mervyn LeRoy, directing a scene from *The Cosmopolitan-First National Production "Oil for the Lamps of China."*

Motion Picture Engineers Sponsor Standards. By Homer G. Tasker.....	113
Defining Noise for Quieting Appliances. By P. L. Alger.....	119
International Electrical Standards Meetings.....	120
Reorganization of ASA Work is Unanimously Approved	125
Consumer Aid to be Asked in Writing Standards	128
ASA Offers Solution of Building Codes.....	130
Nearly Half of NRA Codes Have Standards Clauses	133

Moreland Heads M.I.T. Department.....	118	British Expect Stimulus Through Building Codes	132
U.S.N.C. Elects Dr. Kennelly.....	121	Cast Stone Conference is Called for May 17.....	132
ASA Booth Interests New York Conference....	121	Taylor Instruments Companies is ASA Member	132
MacDonald Represents A.S.C.E. on Standards...	121	Boundaries Between Coal Groups Re-Aligned...	137
Labor, Industry Cooperate on Mining Board....	122	U.S.N.C. Names Officers and Executive Council..	138
Revised Code Provides for Safe Building Exits..	122	Insulator Committee is Revising Standard.....	138
Approve Revised Standard on Trolleys.....	122	Standards Would Clarify Paper Testing Results	138
Mereness Heads C.A.B. Standards Unit.....	122	Cleaners Cooperate on Grades for Dry-Cleaning	139
British Gas Appliances Standard Colors.....	123	ASA Approves Fire Protection Code for Exhausts	139
Revised Ladder Code Approved by ASA.....	123	Graham Motor Employees to Aid Highway Safety	139
I.E.C. Advisory Committees Report.....	123	23 State Legislatures Vote on Safety Glass.....	140
Paper Tests, Research Enlarged by Bureau.....	124	Bankers Ask Uniform Practice for Checks.....	140
Wool Manufacturers Ask Labeling Standard.....	124	Underwriters' Lists of Inspected Appliances....	140
Recommendation on Truck, Trailer Tires.....	129	Newly Published Standards Available From ASA	141
Committee on Toxic Dusts, Gases.....	129	German Rating and Testing Electrical Machinery	141
Eight Final Reports Issued by I.S.A.....	129	Accident Prevention is Aim of Pontiac Factory..	141
Groups Proposed for Building Code Committee	131	Revised Transformer Standard is Considered....	141

AMERICAN STANDARDS ASSOCIATION

ASA MEMBER-BODIES

AM. GAS ASSOCIATION
AM. HOME ECONOMICS ASSN.
AM. INSTITUTE OF BOLT, NUT &
RIVET MFRS.
AM. INSTITUTE OF ELEC. ENGINEERS
AM. IRON & STEEL INSTITUTE
AM. PETROLEUM INSTITUTE
ASSN. OF AMERICAN RAILROADS
AM. SOC. OF CIVIL ENGINEERS
AM. SOC. OF MECHANICAL ENGRS.
AM. SOC. OF SANITARY ENGINEERING
AM. SOC. FOR TESTING MATERIALS
AM. TRANSIT ASSOCIATION
ASSN. OF AM. STEEL MANUFACTURERS
TECHNICAL COMMITTEES
CAST IRON PIPE RESEARCH ASSN.
ELECTRIC LIGHT AND POWER GROUP:
ASSN. OF EDISON ILLUM. COS.
EDISON ELECTRIC INSTITUTE

FIRE PROTECTION GROUP:

ASSOCIATED FACTORY MUTUAL FIRE
INSURANCE COMPANIES
NAT. BD. OF FIRE UNDERWRITERS
NAT. FIRE PROTECTION ASSN.
UNDERWRITERS' LABORATORIES
INSTITUTE OF RADIO ENGINEERS
LIGHT METALS GROUP:
ALUMINUM COMPANY OF AMERICA
MFRS. STANDARDIZATION SOC. OF THE
VALVE AND FITTINGS INDUSTRY
NAT. ASSN. OF MASTER PLUMBERS
NAT. ASSN. OF MUTUAL CASUALTY
COMPANIES
NAT. BUREAU OF CASUALTY AND
SURETY UNDERWRITERS
NAT. ELECTRICAL MFRS. ASSN.
NAT. MACHINE TOOL BUILDERS'
ASSN.
NAT. SAFETY COUNCIL
THE PANAMA CANAL
SOC. OF AUTOMOTIVE ENGINEERS

TELEPHONE GROUP:

BELL TELEPHONE SYSTEM
U. S. DEPARTMENT OF AGRICULTURE
U. S. DEPARTMENT OF COMMERCE
U. S. DEPARTMENT OF INTERIOR
U. S. DEPARTMENT OF LABOR
U. S. GOVT. PRINTING OFFICE
U. S. NAVY DEPARTMENT
U. S. WAR DEPARTMENT

ASSOCIATE MEMBER-BODIES

AM. HOSPITAL ASSOCIATION
AM. WATER WORKS ASSOCIATION
BRICK MANUFACTURERS ASSN. OF
AMERICA
GRINDING WHEEL MFRS. ASSOCIATION
ILLUM. ENGINEERING SOCIETY
INTERNAT. ACETYLENE ASSOCIATION
LIBRARY GROUP:
AM. LIBRARY ASSOCIATION
SPECIAL LIBRARIES ASSOCIATION
RADIO MFRS. ASSN.
SOC. OF MOTION PICTURE ENGRS.
U. S. MACHINE SCREW SERV. BUR.

Howard Coonley, *President*
P. G. Agnew, *Secretary*
Leslie Peat, *Editor*

F. E. Moskovics, *Vice-President*
Cyril Ainsworth, *Assistant Secretary*
Ruth E. Mason, *Assistant Editor*

MAY
1935

INDUSTRIAL STANDARDIZATION AND COMMERCIAL STANDARDS MONTHLY
is published by the American Standards Association, 29 West 39th Street,
New York, with the cooperation of the National Bureau of Standards
Subscription price \$4.00 per year (foreign \$5.00); single copies 35 cents

Vol. 6
No. 5

Motion Picture Engineers Sponsoring Standards for Apparatus & Materials

by

Homer G. Tasker,

President, Society of Motion Picture Engineers

OF AN industry so dependent upon artistry, skill, and temperament as is the motion picture industry, it seems unreasonable to claim that standardization is of tremendous importance and in some respects absolutely essential. The work of actors, writers, and directors requires no standardization—quite the reverse in fact.

But this industry, seemingly confined to art and personalities, nevertheless has its very foundation rooted in things mechanical and scientific to an extent scarcely equalled in any other major industry.

Furthermore, its tremendous success has been built upon "quantity production" of that elusive thing called entertainment, under such circumstances that standardization becomes of paramount importance.

Where Coordination Counts

In a very real sense the entire activity of a motion picture studio is devoted to "design and tooling" while the actual "production, sales, and delivery" of the product occurs in some fifteen thousand local branch "factories". It is clear that more than usual coordination between the "tooling" and the operation of production machinery must be achieved if the product is to have uniformly high quality.

For example, it is necessary that the projection machines in every theater have film-propelling sprockets whose teeth are spaced to the same pitch and gauge and that all films be perforated accordingly; otherwise, the problem of getting the right film to the right theater would become insurmountable. Furthermore, it would be regrettable if the film from which pictures are projected upright in one theater were to produce inverted pictures

Aesthetics, individuality and artistry of actors brook no standardization, but production problems of huge industry need standards, experts believe

in another or if, instead of scanning the sound track, the sound apparatus were to scan the picture area with meaningless result; hence the size and position of sound and picture areas must be carefully standardized.

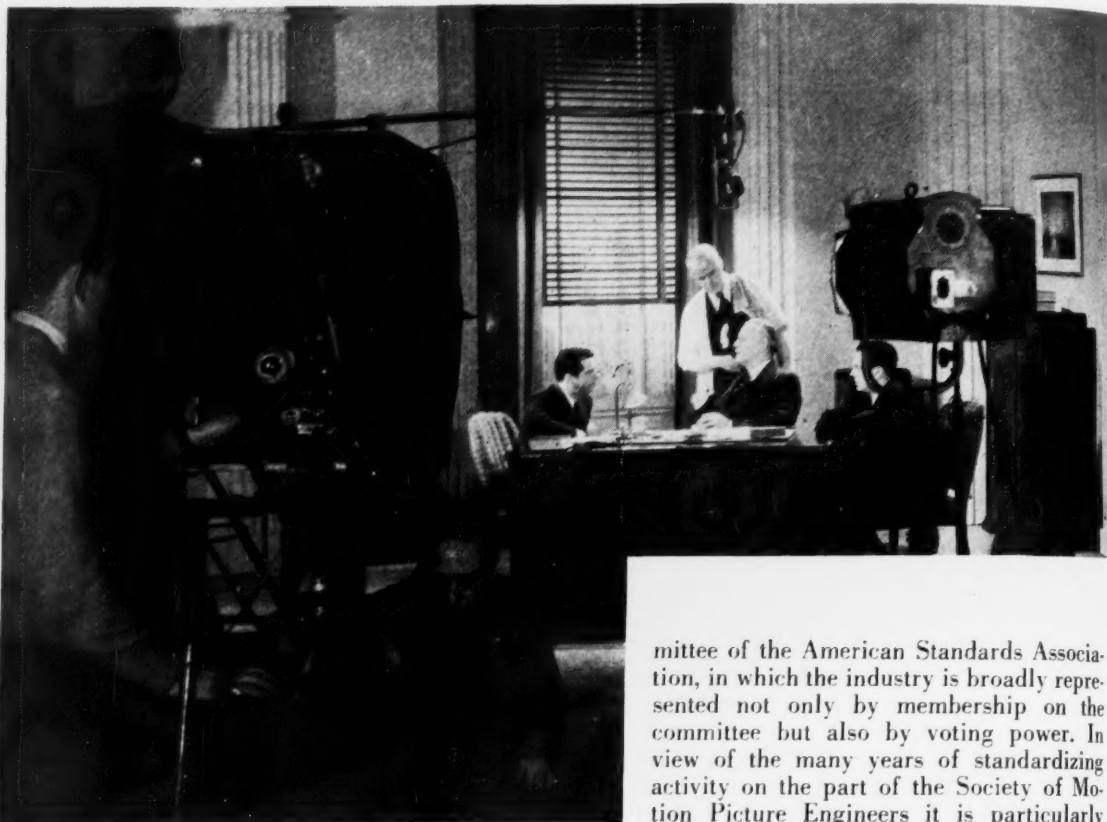
In 1916, realizing this need for standardization and for cooperative effort, a handful of pioneer workers in this field organized the Society of Motion Picture Engineers "For advancement in theory and practice of Motion Picture Engineering and of the allied arts and sciences, the standardization of the mechanisms and practices employed therein, and the maintenance of a high professional standing among its members."

In the twenty years ensuing the Society has been able to bring much order out of previous chaos, greatly accelerate the growth of the industry, and effect large economies in the production and exhibition of motion pictures.

Early in the Society's history a number of technical committees were formed, of which the Standards Committee was the most important. Proposals for standardization originated within this Committee or flowed to it from the other technical committees or from individual members of the Society.

Committee Membership Balanced

So far as possible the Standards Committee has been kept in balance as to the scientific or practical abilities of its membership and the technical and commercial interests which they represent, yet breadth of representation, while important, has not been absolutely essential in



Courtesy, Castle Films

Industrial pictures for salesmen and factory workers are making rapid gains in American industry, as are educational films of every nature. Here the 16 mm is used extensively

the past standardizing activities of the Society, since their direct result in each case was an SMPE standard and not a national or international standard.

The acceptance of such standards by the industry is a purely voluntary matter. Although the members of the Standards Committee are severally employed by various of the commercial interests in the industry and their views may reflect the attitudes of their respective organizations, nevertheless their votes on the Standards Committee are the votes of individuals and not of commercial interests.

SMPE Sponsors Work

It is appropriate that steps should now be taken to formulate American standards for the motion picture industry through a sectional com-

mittee of the American Standards Association, in which the industry is broadly represented not only by membership on the committee but also by voting power. In view of the many years of standardizing activity on the part of the Society of Motion Picture Engineers it is particularly appropriate that this Society should sponsor the new project.

Goldsmith Starts National Work

Some two years ago Dr. Alfred N. Goldsmith, then President of the Society of Motion Picture Engineers, undertook the preliminary work of determining whether there was sufficient accord among the various commercial and technical interests in the motion picture field to make possible the creation of a Sectional Committee on Motion Picture Standards within the American Standards Association. As a result of his interest and energetic pursuit of this project the Committee has now been formed and its structure determined, and the various interests concerned have, for the most part, nominated their representatives. In recognition of Dr. Goldsmith's great interest in this project, and his untiring efforts to bring it about, it is most fitting that he has been appointed Chairman of the committee.

In determining the structure of this committee the Society of Motion Picture Engineers has sought advice from all available sources in order that the committee should be as fully representative as possible. It was necessary to keep in mind at the same time that the committee should not be so large as to be unwieldy and for this reason a number of smaller organizations were not initially

invited to participate. Representation through trade associations was also used where possible to simplify the committee structure. It should be thoroughly understood that the omission of any company, society, or individual from the committee is in nowise discriminatory and does not jeopardize the rights of such parties to obtain membership if desired. This is accomplished merely by writing to the American Standards Association, setting forth the reasons why the party in question has an interest in becoming a member of the committee.

Personnel and Scope

The degree to which a broadly representative character for this committee has been achieved may be observed from the list shown here.

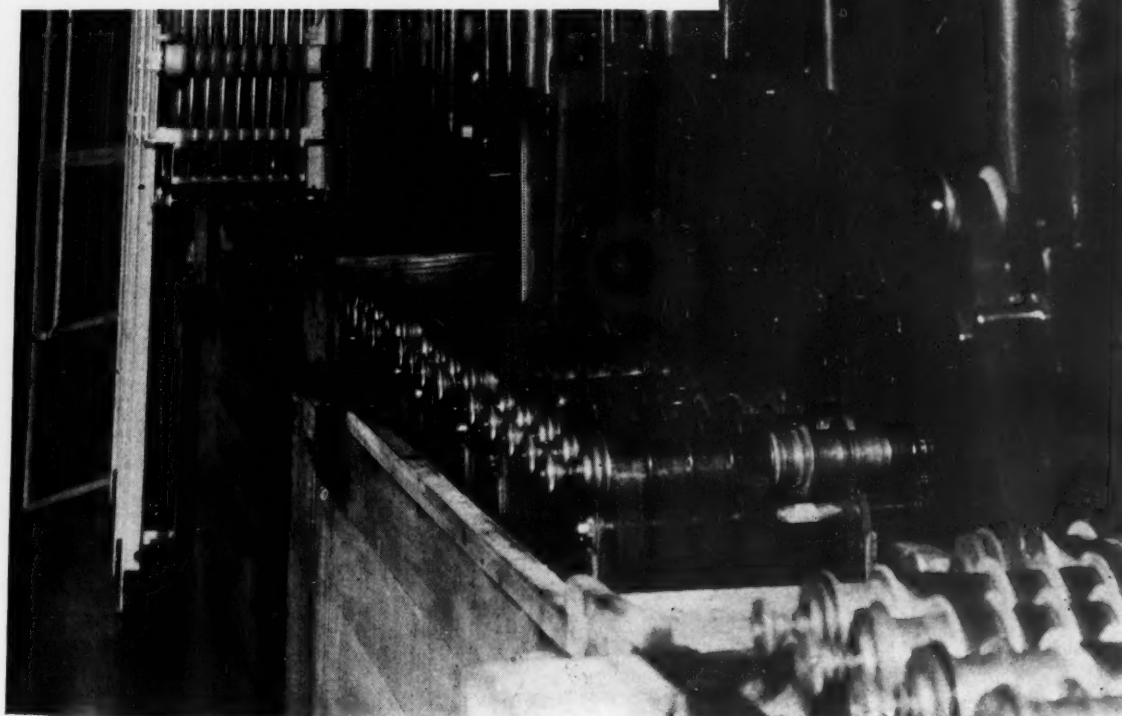
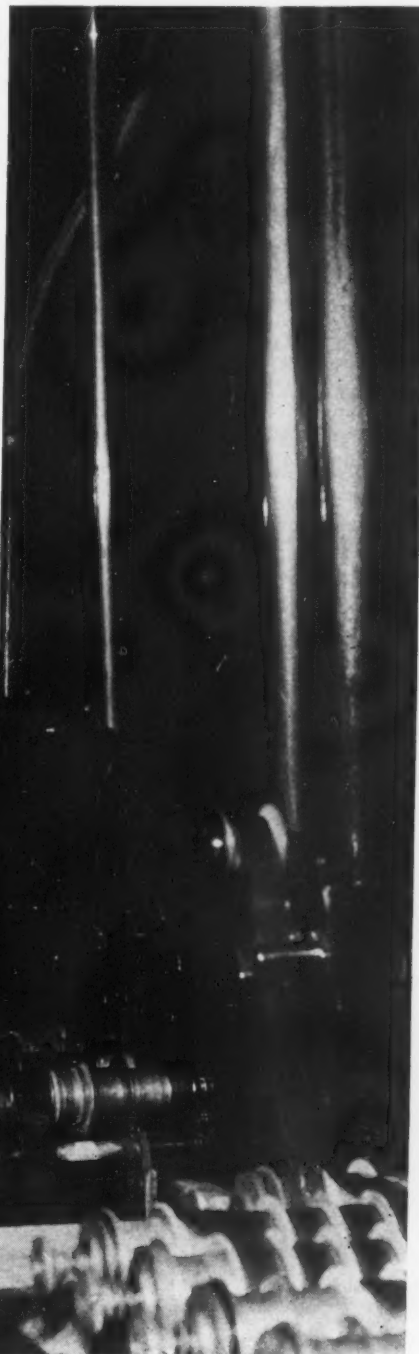
As contrasted to the procedure of the SMPE Standards Committee the letter ballots of the members of this Sectional Committee will constitute the approval or disapproval not of the individual members, but of the commercial or technical interests which they represent.

The Committee has before it an initial program of great importance and extent. The most important single item of this program is consideration of a newly revised Standards booklet of the SMPE. This revision has been carried forward by the Standards Committee of the SMPE over a period of approximately two years.

Many of the earlier standards have been modified as to tolerances and minor dimensions and many of the charts have been redrawn to depict

Negative developing machine, where from 35,000 to 70,000 feet of film is developed per night

Courtesy Paramount



more accurately the standards in question. Dimensional standards for 16-millimeter sound film have been added and by no means least in importance is the inclusion of the Release Print Standard sponsored by the Academy of Motion Picture Arts and Sciences. The Academy will have representation on the Sectional Committee equal to that of the SMPE and may be looked to for many valuable contributions to motion picture standards.

The 16-Millimeter Problem

In consequence of action taken in America by the SMPE and of subsequent action taken by

various parties in Europe, the question of standardization upon the form and dimensions of 16-millimeter sound film has assumed very great importance. As a result of the recent European action looking toward an international standard, there now appears a possibility that two international standards might occur in the 16-millimeter sound film field, the two being almost identical except that either one is essentially a mirror image of the other. It is rather obvious that this consideration must have resulted through original intention to adopt a single world standard with subsequent error as to "leftness" or "rightness" of the actual proposals. This is in-

Many Groups Are Interested In Motion Picture Standards

Representatives of technical associations, manufacturers, and consumers will take an active part in writing standards for the motion picture industry, under the procedure of the American Standards Association. These standards will be submitted by the committee to the Society of Motion Picture Engineers, which is taking the leadership in the work. After approval by the Society, the standards will be submitted to the American Standards Association for final approval as national standards.

Technical or Engineering Associations

American National Committee for International Congresses of Photography
American Society of Cinematographers
Acoustical Society of America
Academy of Motion Picture Arts and Sciences

Fire Protection Group of the ASA
Illuminating Engineering Society
Society of Motion Picture Engineers

Amateur Cinema League

Manufacturers

Eastman Kodak Company
Agfa Ansco Corporation
Dupont Film Manufacturing Company
National Electrical Manufacturers Association
Theatre Equipment Supply Manufacturer's Association
Bell & Howell
Akeley Camera Company
Mitchell Camera Company
Motion Picture Laboratory Association
Electrical Research Products, Inc.
R. C. A. Victor Company
National Carbon Company
International Projector Corporation

Consumers

Motion Picture Theatre Owners of America
Allied States Association of M. P. Exhibitors
Motion Picture Producers and Distributors of America

Monogram Pictures

General

National Bureau of Standards
Bell Telephone Laboratories

Representative

Walter Clark
George A. Mitchell
F. L. Hunt
Porter H. Evans, temporary representative. Three to be appointed
A. R. Small
Ralph E. Farnham
A. N. Goldsmith, E. K. Carver, H. G. Tasker
F. G. Beach

L. A. Jones
Paul Arnold
F. N. Oakley
J. G. T. Gilmour
Oscar F. Neu
J. A. DuBray
J. L. Spence
G. A. Worrall
One to be appointed
C. Flannagan
M. C. Batsel
Wm. G. Kunzmann
H. Griffin

One to be appointed
One to be appointed
D. Palfreyman and
A. S. Dickinson
One to be appointed

E. W. Ely
H. M. Stoller

deed the case and it is most unfortunate that a series of international difficulties should have arisen over so small a point.

A brief explanation of the origin of this difficulty is in order here:

1. *Early American Proposal.*—During 1931, research and development in sound on narrow films had so far progressed in America that the Standards Committee of the SMPE undertook a study of the numerous proposals which had been made for the accommodation of the sound track on these films. This study resulted in publication of the Committee's report in the November, 1932 issue of the *Journal of the Society of Motion Picture Engineers*. In this report were shown a recommended and a non-recommended standard of which we are concerned only with the recommended standard since it is the only one closely comparing with the European proposal. The drawing contained the word TITLE so positioned as to indicate a position of the sound track opposite to that normally employed in 35-millimeter sound film, although the text of the Committee's report did not discuss this point.

2. *German Proposal.*—In the April, 1933 issue of *Die Kinotechnik*, DIN standards for 16-millimeter were published in which all dimensions were identical to those shown in the American proposal. In the drawing there was no title or other figure shown on the film to indicate whether the sound track was placed in accordance with the American proposal but there appeared in the text immediately below this drawing a notation to the effect that the sound track lies left as "viewed from the objective" which is exactly the reverse of the American proposal.

Proposed Standards Misread

3. *Mutual Misreading of the Proposals.*—American engineers seeing that the drawing appeared to be in all respects a copy of the American proposal and being for the most part unfamiliar with the German language did not discover this discrepancy. It would also seem that the German engineers were unaware of their misreading of the American drawing since an article by M. Flinker, published October 20, 1933 in *Die Kinotechnik* states that the direction of travel of the film through the machine was taken from American proposals as published in the November, 1932 report of the SMPE Standards Committee above mentioned.

Incidentally, it appears from Mr. Flinker's article that in every respect the American standards had been faithfully copied so far as the German Committee was aware.

4. *Discovery of the Discrepancy in German and American Standards.*—Until November of the

16 Mm Sound Film Industry Is Growing Rapidly

Two years ago no commercial machines using 16-mm sound film were available. Today over 2,000 machines have been built and sold, and more than 3,000,000 feet of 16-mm sound film has been produced.

Twenty per cent of the machines sold are being used in private homes; 80 per cent are used in schools, libraries, by industrial organizations for advertising purposes, by the Government in concentration camps, and in other small theaters.

The total investment in the 16-mm sound film industry is well above \$1,500,000.

same year, the SMPE Standards Committee, having failed to observe the discrepancy between the DIN and the American proposals, had no comments to offer. During November a communication was received from Germany expressing some astonishment that American 16-millimeter sound films exhibited at the International Motion Picture Exposition in Paris, should have sound records apparently located at variance with the American standard, being on the opposite side of the film from that adopted in Germany.

It is somewhat surprising that the German Committee, having intended to copy the American Standard, should have concluded that this American machine and film shown in Paris was in error with respect to the American standard yet did not review the American drawing which, if not ostentatiously, at least definitely, shows agreement between the American proposal and the American apparatus.

On the other hand, the original mistake made by the German Committee is to be condoned on the ground that it was quite natural for them to expect the sound track in a 16-millimeter standard to be positioned in accordance with the 35-millimeter standard and their failure to observe the exact nature of the American proposal is, therefore, much akin to the American failure to observe the German mistake.

5. *Subsequent Conferences in Europe.*—There being a number of proposals in Europe substantially at variance with the DIN proposal, conferences were called at Baden Baden at which the DIN proposal was endorsed as distinguished from 17½-millimeter and similar proposals. On June 24, 1934 a conference was held at Stresa under the sponsorship of the International Educational

Cinematographic Institute further considering the results of the Baden Baden conference and attempting to arrive at general agreement for an international standard.

Endorse German Proposals

At the Stresa conference there appeared one hastily appointed American representative, and four European representatives who were instructed to review the technical merits only, and educational uses primarily, and whose deliberations resulted in endorsement of the German proposals, the American representative dissenting.

On the part of the Germans there has been some feeling of dissatisfaction with American failure to promptly point out the discrepancy between the German proposal and the American proposal and on the part of the Americans there has been some feeling of dissatisfaction with the Stresa conference presuming to handle standards matters in Europe through irregular channels rather than through the International Standards Association and also with lack of opportunity to arrange adequate representation at the Stresa conference.

From the voluminous correspondence which has passed between persons here and abroad, it appears that both of these attitudes are quite explainable.

The Standards Committee of the SMPE shares with the DIN Committee, the I.C.E. Committee, the British Standards Institute, and others, regret for the errors and misunderstandings which have occurred but hopes that by no one will these errors be held of paramount importance.

International Standard Needed

The SMPE feels that it is less important to review what mistakes have been made and who may be responsible for them or to consider the prestige of the SMPE or any other important body than it is to determine what steps may be economically taken to arrive at a single international standard for 16-millimeter sound film. For this reason the SMPE has requested that the American Standards Association take steps leading to a further consideration of the 16-millimeter sound film standards through the regular international standardizing channels. In consequence, the International Standards Association has requested that the National Standards Associations of the several interested nations arrange representation at a discussion of this matter to be held with the cooperation of the International Congress of Photography meeting at Paris in July. It is hoped that this discussion may lead to general accord.

Moreland Heads Electrical Department of M.I.T.

E. L. Moreland, senior partner of the Consulting Engineering firm of Jackson and Moreland, has been appointed head of the Department of Electrical Engineering of the Massachusetts Institute of Technology to succeed Professor Dugald C. Jackson, who is retiring.

Mr. Moreland is a member of the Standards Council of the American Standards Association representing the American Institute of Electrical Engineers. He is chairman of the A.I.E.E. Standards Committee.

Mr. Moreland is chairman of the sectional committee on Standardization of Mercury Arc Rectifiers and a member representing the A.I.E.E. on the sectional committee on Rotating Equipment Used on Railway Cars and Locomotives. Both of these committees serve as advisory groups to the U. S. National Committee of the International Electrotechnical Commission.

Propose Iron and Steel Pipe Standards for Approval

The proposed American Tentative Standard for Wrought-Iron and Wrought-Steel Pipe (B36.10) has been submitted to the American Standards Association by the joint sponsors, the American Society of Mechanical Engineers and the American Society for Testing Materials. Harold H. Morgan, Robert W. Hunt Company, Chicago, is chairman of the committee which developed the standard, and Sabin Crocker, Detroit Edison Company, is secretary.

The joint sponsors also submitted to the American Standards Association for approval as American Standards, three specifications formerly approved as American Tentative Standards. These are the specifications for Electric-Resistance-Welded Steel Pipe (B36.5-1934); Lock-Bar Steel Pipe (B36.7-1934); and Riveted Steel and Wrought-Iron Pipe (B36.8-1934).

ASA Has Index to German Standards

The 1935 Index to all German standards, DIN Normblatt-Verzeichnis 1935, is now being sold or loaned by the American Standards Association Library. The Index is published in German, and the standards are indexed alphabetically and by classification number.

The price of the Index, 260 pages, is \$1.65.

Defining Noise Is First Step Toward Quieter Appliances

by

P. L. Alger

*General Electric Company
Schenectady, N. Y.*

American Standards Association committee provides language for describing noise, and measuring loudness, paving way for control of noise

EVERYBODY knows that the public wants quieter living conditions, as manifested by a growing and insistent demand for quieter apparatus. However, very few know how this need is being met, or are conscious that there is any program for making progress in this new field. This symposium demonstrates the progress that has been made in defining and controlling noise and suggests the further progress which we may expect in the future.

Standard Establishes Language

At the Institute's convention in Rochester, N. Y., in May 1931, the possibility of the control of noise by design methods was suggested, and our ability to measure it was demonstrated. However, there was no common language for describing noise, and any real understanding of it was confined to a few laboratory experts. Largely stimulated by the discussion there, subsequent discussions led to the formation in January, 1932 of the American Standards Association's sectional committee on acoustical measurements and terminology, which brought out in May, 1934, the first draft of a proposed standard, establishing an adequate language for describing noise and a fundamental method of determining the loudness of any sound.

¹ Discussion at the noise session of the Winter Convention of the American Institute of Electrical Engineers of a paper by Ralph G. McCurdy, chairman, Technical Committee on Noise Meters and Noise Levels, of the ASA Sectional Committee on Acoustical Measurements and Terminology. Mr. McCurdy's paper was published in the January, 1935, issue of *Industrial Standardization* and *Commercial Standards Monthly*, and *Electrical Engineering*. A complete report of the discussion is published in *Electrical Engineering*, April.

Now, we have presented to us the basis of a proposed standard for noise instruments that will enable measurements made by any one anywhere to be truly compared with past and future measurements. When this standard comes into actual use, we shall for the first time have an industrial technique for measuring noise, which may well mark the birth of the real science of noise control.

Papers also have been presented showing how noise instruments may be used to describe and improve noise conditions, forecasting the imminent general use of numerical loudness to describe noise and to specify required noise levels. It is evident that all industries, such as building, air conditioning, domestic appliance, and others concerned with living conditions, will find it of great advantage to take up the use of these new instruments and to so develop their own testing methods that the noise produced by their apparatus may be clearly specified.

To Establish Quiet Levels

Besides this rapid development in the use of noise instruments and noise specifications that may be expected, we may look for the development of accepted levels of quietness for various living conditions. Just as we have comfort levels of temperature, humidity, and light, so may we expect comfort levels of quietness for the home, the office, and the street to be determined by the scientists, and established as measures of desirable quality in all forms of apparatus.

International Meetings Will Consider Problems of Electrical Standardization

MEETINGS of the International Electrotechnical Commission, the International Commission on Illumination, and the International Conference on Large High-Tension Electric Systems are to be held in Europe this summer.

For 20 years the United States has been represented in the International Electrotechnical Commission. Since 1931 the United States National Committee of the IEC has been an integral part of the electrical standardization work under the procedure of the American Standards Association.

The meetings of the International Electrotechnical Commission will be held at The Hague from June 18 to 21 and at Brussels from June 24 to 27. At The Hague, the following subjects will be considered:

- Nomenclature (including international electrotechnical vocabulary, electric and magnetic magnitudes and units, and letter symbols)
- Steam turbines
- Aluminum for conducting purposes
- Insulating oils
- Radio communication
- Electric cables

At Brussels the following subjects will be considered:

- Graphical symbols
- Lamp bases and sockets
- Standard voltages and currents and high-voltage insulators
- Electric traction equipment
- Electrical measuring instruments
- Terminal markings of electrical machines and apparatus
- Power switchgear
- Internal combustion engines

In addition, meetings of the International Comité Mixte on electrical traction equipment, composed of a number of international organizations interested in the standardization of electrical traction equipment, will be held at Brussels.

World Commission 30 Years Old

The International Electrotechnical Commission is the outstanding international organization in the field of electrical standardization. It was founded as the result of a resolution passed at the International Electrical Congress in St. Louis

in 1904. The Commission consists of 26 national committees which are fully representative of all sections of the electrical industry in their respective countries. The officers of the United States National Committee of the Commission are: Dr. C. H. Sharp, President; Dr. H. S. Osborne, vice-president; Mr. C. R. Harte, vice-president; and Dr. P. G. Agnew, secretary.

Confer on High-Tension System

The International Conference on Large High-Tension Systems will meet in Paris June 27 to July 26. The object of the International High-Tension Conference is to study the problems of production, transmission, and distribution of electrical energy at high-tension. The Conference meets every two years, at which time papers of interest to manufacturers, utilities, consulting engineers, and others are read and discussed. The work of the Conference will be divided into three sections: First, production and transmission of electricity; second, construction, maintenance, and insulation of lines; third, operation and production of systems.

International Meeting on Light

The 1935 Session of the International Commission on Illumination will be held in Berlin, July 2-9. E. C. Crittenden is President, Dr. C. H. Sharp is Vice-President, and G. H. Stickney is Secretary-Treasurer of the United States Committee of the International Commission on Illumination, as well as acting as United States members of the International Executive Committee.

The United States Secretariats manage three of the 27 international committees: Factory and School Lighting, Aircraft Lighting, and Lighting Education. In Factory and School Lighting, world-wide statistical surveys are being made on conservation of eyesight, special attention being given to the welfare of school children with defective vision. Because of the international character of aerial navigation, important standards for lighted signals are being set while the practices are still flexible. An English-French-German

vocabulary of special terms is being established.

The Commission is cooperating with the International Committee on Weights and Measures, an organization established under international treaty to which this country is a party. Progress is well under way to the establishment of a primary standard of light and toward the elimination of certain discrepancies in light measurement, which have proved embarrassing. The accurate measurement of the new gaseous-tube electric illuminants, which is becoming more and more important, is also engaging scientific attention.

These and many other vital questions are scheduled for discussion in Berlin, not the least of which are street and automobile lighting, in connection with which considerable differences of opinion exist in various countries.

The National Committee is endeavoring to secure a large attendance of American experts in order to insure an adequate expression of the viewpoints prevailing in this country.

Electrical engineers and others who may be traveling in Europe and who are interested in attending any of the international meetings may secure further information by writing to Dr. P. G. Agnew, secretary of the United States National Committee of the International Electrotechnical Commission, 29 West 39 Street, New York, for information concerning the IEC; G. H. Strickney, Secretary, United States National Committee of the International Commission on Illumination, NELA Park, Cleveland, Ohio; and F. Attwood, 50 Church Street, New York, concerning the International High-Tension Conference.

USNC Elects Kennelly As Honorary President

Dr. A. E. Kennelly, Professor Emeritus of Electrical Engineering of Harvard University, was elected Honorary President of the United States National Committee of the International Electrotechnical Commission, by acclamation, at the recent meeting of the Committee.

Dr. Kennelly has been Honorary Secretary of the United States National Committee for many years and has served as its advisor in international conferences abroad on many subjects. He has served with exceptional distinction on the committees on rating of electrical machinery and electrical and magnetic magnitudes and units.

In proposing Dr. Kennelly for Honorary President, Dr. H. S. Osborne of the American Telephone and Telegraph Company said:

"I esteem it a great honor to nominate Dr. Kennelly for Honorary President of the USNC. It is not possible for us to estimate wholly the

ASA Booth Interests New York Conference

The American Standards Association display booth at the Sixth Annual Greater New York Safety Conference brought inquiries and comments indicating widespread interest from a large number of the safety workers present at the Conference.

The Safety Code for Elevators, Dumbwaiters and Escalators, the Building Exits Code, the Code for Safety in the Construction Industry, the Safety Code for the Prevention of Dust Explosions, and the National Electrical Code attracted particular attention.

The Greater New York Safety Conference brings together each year the people in the New York area who are working to eliminate industrial accident hazards both in industry itself and in connection with government and private agencies.

The Sixth Annual Conference, March 5-7, attracted the largest number of people in the history of the organization.

service which Dr. Kennelly has rendered over a long period of years.

"He served the U. S. National Committee as Secretary for more than ten years and has been Honorary Secretary for many years since. He served as Technical Advisor on various subjects, including Rating of Electrical Machinery and Electric and Magnetic Magnitudes and Units. He attended a great many IEC meetings abroad where his knowledge of languages as well as his familiarity with the various subjects was of inestimable value to the U. S. National Committee."

MacDonald Represents A.S.C.E. on Standards

Eugene L. MacDonald, of Parsons, Klapp, Brinckerhoff and Douglas, New York, has been appointed by the American Society of Civil Engineers to represent the Society on the Standards Council of the American Standards Association.

L. G. Holleran, New York, is alternate representative for Mr. MacDonald on the Council.

The ASA Standards Council is the body responsible for the approval of projects and standards submitted to the American Standards Association by interested organizations.

Labor, Industry Cooperate On Bureau of Mines Board

Dr. John Wellington Finch, Director of the Bureau of Mines, states that he is gratified to announce the personnel of a new Bureau of Mines Advisory Board which he has just set up. Twenty years ago, he points out, it would have been impossible to induce representatives of industry and labor to sit down around the same table to discuss such problems as come before the Bureau. The personnel of the board and the groups represented are as follows:

Eastern Bituminous Producers—J. P. Williams, Jr., president, Koppers Coal & Transportation Co., and president, National Coal Association; L. E. Young (alternate), vice-president, Pittsburgh Coal Company.

Anthracite Producers—Louis C. Madeira, 3d, Anthracite Institute; Cadwallader Evans, Jr. (alternate), Hudson Coal Co.

Western Bituminous Producers—Eugene McAuliffe, president, Union Pacific Coal Co.; D. S. Hanley (alternate), vice-president, Pacific Coast Coal Co.

Mining Employees—John L. Lewis, president, United Mine Workers; A. D. Lewis (alternate), United Mine Workers; William Green, president, American Federation of Labor; Thomas H. Brown (alternate), president, International Union of Mine, Mill, and Smelter Workers.

Oil and Gas Field Workers—H. C. Fremming, president, International Association of Oil Field, Gas Well, and Refinery Workers.

Copper Industry—Cleveland E. Dodge, vice-president, Phelps Dodge Corporation.

Silver, Lead, and Zinc Industries—H. A. Guess, vice-president, American Smelting & Refining Co.; Frank M. Smith (alternate), smelter director, Bunker Hill Smelter.

Non-Metal Mineral Industries—Otho M. Graves, president, General Crushed Stone Co.

Mineral Policy and Government Committee—C. K. Leith, chairman, department of geology, University of Wisconsin.

Mining and Metallurgical Engineering—H. N. Eavenson, Eavenson, Alford & Hicks.

Liaison Representative for Mining Industry in General—Howard I. Young, president, American Zinc, Lead & Smelting Co., and president, American Mining Congress; Julian D. Conover (alternate), secretary, American Mining Congress.

Iron and Steel Industries—Thomas M. Girdler, chairman of board and president, Republic Steel Corporation.

Revised Code Provides For Safe Building Exits

A revised edition of the Building Exits Code, prepared under the leadership of the National Fire Protection Association, has been approved as American Tentative Standard by the American Standards Association.

Copies of the revised Code are available from the National Fire Protection Association, 60 Batterymarch Street, Boston, or from the American Standards Association. The Code is 75 cents a copy. ASA Members are entitled to 20 per cent discount when ordering approved American Standards from the ASA office.

Approve Revised Standard On Trolley Construction

Copies of the recently approved American Standard specifications for 750-volt direct suspension overhead trolley contact construction are now available at 25 cents each.

The standard is a revision of the former edition approved in 1923, and was submitted to the American Standards Association by the proprietary sponsor, the American Transit Association.

Copies can be ordered from the American Transit Association, 292 Madison Ave., New York, or from the American Standards Association. ASA Members ordering copies of approved standards from the American Standards Association are entitled to a 20 per cent discount.

Mereness Heads Standards Unit For Consumers' Advisory Board

Appointment of H. A. Mereness as director of the Standards Unit of the Consumers' Advisory Board has just been announced by the NRA.

Mr. Mereness is a technologist with broad experience in the textile industries. He has for several years been director of the Technical Bureau of the National Federation of Textiles, Inc. With this organization, Mr. Mereness initiated a program looking toward standardization of silk and rayon fabrics, and developed shrinkage tests for silk and rayon which it is expected will be formulated into standards by Committee D-13 on Textile Materials of the American Society for Testing Materials.

British Gas Appliances Need Variety of Standard Colors

The publication by the British Standards Institution of its *Dictionary of Colour Standards* provides a good opportunity for the British gas industry to take definite steps toward the standardization of the colors it uses, according to the *Gas Journal*, London.

The gas industry could adopt a gas range of two or three of the best standard tints in each main color band and merchandise them, with their correct British Colour Council nomenclature, to the public, the article suggests. In spite of differences in finish, surface, and texture, a series of standards which would be readily understood could be established, and many of the insipid tints now in use would be replaced by good colors.

The gas industry is now moving toward greater standardization, the *Journal* points out, and standardization of colors will assume increasing importance.

Much confusion has existed in the past in color, and until recently very little effort had been made to produce any form of standardized color nomenclature. All colored objects, materials, or surfaces produced come within the family group of one of several spectrum colors—red, orange, yellow, green, blue, and violet.

We have organized the measurement of time, of weight, of distance. We have an alphabet, a fixed language, so that we can read and write and communicate with others. Yet one of the oldest of human possessions, the one thing common to the people of every nation—color—is still practically unknown.

We are entering the greatest color-using age the world has seen—an age, too, of fierce competition—and in view of these facts, the subject of color—its history, theory, and practice, as well as an understanding of the psychology of color—is as important an educational subject in our present-day existence as the study of mathematics, literature, or history.

Closer Cooperation Needed

It has been found that different color-using industries have been so accustomed to matching to the materials in which they usually work that they have been inclined to lose sight of the fact that a similar color can be reproduced in other materials and can be known by the same name. It has been suggested that consultative committees representing each specialized industry be set up to work with the British Colour Council. These committees would bring about a closer cooperation between those industries which react upon one another. For instance, a consultative commit-

Revised Ladder Code Approved by ASA

A revision of the American Tentative Standard Safety Code for the Construction, Care, and Use of Ladders has been approved by the American Standards Association.

The revision is the result of experience in the manufacture and use of ladders under the original code approved in 1923, which indicated that changes and additions were desirable before the code could be adopted as an American Standard.

The revised code is now being published by the American Standards Association and will be available soon.

The American Society of Safety Engineers—Engineering Section of the National Safety Council is sponsor for the work on the ladder code.

tee concerned with interior decoration would cooperate with manufacturers of household furnishings and equipment.

In this way, dyers, manufacturers, wholesalers, and retailers are able to plan with a view to what a public of growing discrimination will wish to buy in six months' time, with a resulting economy of time and money and the reduction of unsalable stock.

IEC Advisory Committees Report on Electrical Projects

A report on the status of 24 advisory committees of the International Electrotechnical Commission, as of January 1, 1935, has been received from the Central Office in London, England.

The subjects covered by the various advisory committees are:

- Fundamental Definitions
- Machines and Transformers
- Switchgear and Control Gear
- Apparatus for Scientific and Industrial Measurements
- Generation, Transmission, Distribution
- Electric Traction
- Other Power Applications
- Thermic Applications
- Lighting
- Telegraphy, Telephony
- Radio-Communication
- Radiology
- Electrobiology
- Miscellaneous

Copies of the report can be obtained on request from the American Standards Association Library, 29 West 39th Street, New York.

Paper Tests and Research Program Enlarged by Bureau of Standards

Under the direction of the National Bureau of Standards the paper-testing committee of the Technical Association of the Pulp and Paper Industry has developed 37 standard testing methods and has 14 additional ones under development at the present time.

With the assistance of funds from other Government agencies and from outside organizations, the National Bureau of Standards plans to expand the research activities of its paper section during the ensuing year.

A new project recently initiated is a study of the possible effect on papers of fumigating gases used to rid written and printed materials of destructive insects. This was undertaken at the request of the National Archives and with their financial assistance.

Use Films for Records

Another investigation which will take the section into a new field is concerned with the stability of prints on motion picture films. This form of record material has assumed great importance: librarians, educators, and others interested in the spreading and preservation of knowledge are deeply interested in the possibilities of film records. With the assistance of a fund granted for the purpose to the National Research Council by the Carnegie Foundation, it is planned to make a year's study of the resistance of the film records to various degrees of temperature, humidity, and light.

It is hoped that this work can later be expanded into a comprehensive study of the many other problems concerning miniature records, and of problems related to sound recordings.

In its cooperation with the T.A.P.P.I. committee, an attempt will be made to produce a device for measuring in numerical terms the rate of failure of printed currency under conditions which result in appearance and loss of strength similar to those caused by actual service wear. This work is supported by the Treasury Department.

Government Specifications

One of the continuous jobs of the paper section, and of the Bureau in general, is the development of the technical requirements of Government purchase specifications. This involves service as committee members and sometimes research to secure technical information not available. The

standardization project on lithographic papers will be continued through at least a part of the year. This work has resulted in three publications relating to improvement of register in successive color prints, and another will be issued in the near future.

Although the experimental paper mill can be operated only intermittently (with the limited personnel available the mill operatives must not only make the papers but also test them) it is hoped that progress can be made in studying the relation of the papermaking materials both fibrous and non-fibrous, to the stability and strength of book papers. This will complete the general program of work of this kind related to the preservation of records, as similar studies of writing papers have been made.

Publish Standards on Insulating Materials

The four standards for methods of testing insulating materials, which were approved by the American Standards Association recently, have been published by the American Society for Testing Materials. Copies are now available.

Molded materials used for electrical insulation, electrical insulating oils, rubber matting for use around electrical apparatus or circuits, and tests for resistivity are covered in these standards.

A committee under the leadership of the American Society for Testing Materials approved the standards, which are known as A.S.T.M. standards D 48-33, D 117-33, D 178-24, and D 257-33.

Copies can be purchased from the American Society for Testing Materials, 260 S. Broad Street, Philadelphia, or from the American Standards Association, at 25 cents each. ASA Members are entitled to 20 per cent discount when ordering standards through the ASA office.

Wool Manufacturers Ask Bureau for Commercial Standard on Labeling

The National Association of Wool Manufacturers has requested the National Bureau of Standards to cooperate in establishing a Commercial Standard for labeling fabrics containing camels hair or other specialty fibers.

The project is expected to cover definitions, nomenclature, methods of test, tolerances, marking and labeling.

ASA Reorganized to Expedite Increased Range of Activity

REORGANIZATION of parts of its structure to cope with the ever-increasing volume of work and the widening range of proposed standards was approved in principle by a meeting of Standards Council held on April 25 in New York. Chairman J. C. Irwin presided.

Without dissenting vote reorganization was approved when the report of the Joint Administrative Committee and the Committee on Procedure was adopted unanimously. The Chairman and the Committee on Procedure were authorized to organize a Mechanical Committee and a Textile Committee at once under the provisions of the plan. Other such committees will be formed as rapidly as feasible.

In general, the plan proposes a group of industry committees whose functions will be to steer the standards work in their respective fields, and to serve as correlating groups to avoid unnecessary duplication of work.

This principle is well established in the American Standards Association procedure. There are now three general committees known as the Electrical Standards Committee, the Mining Standardization Correlating Committee, and the Safety Code Correlating Committee. These all perform the correlating function for standards of interest to them, and have served to prevent duplication of work and to plan wide-range projects in their respective fields.

The chart on the following page shows the type of proposed reorganization proposed to Standards Council. Some changes of the terminology of committees will be incorporated in the next report of the committee, it was indicated from the discussions on several debated points.

Idea Launched Two Years Ago

In December, 1933, there was considerable discussion at a meeting of Standards Council on the desirability of providing, within the Council, industry groups to take care of the standardization problems for the various industries which have brought problems to the ASA from time to time, and which will, it is expected, ask for standards projects.

Standards Council approves move to departmentalization of the work of the ASA Standards Council at April 25 meeting

The first report of the committee was presented in October, 1934, and in December another report was presented.

The committee reported that because of the importance of the departmentalization of the Association's work, a plan of reorganization should be developed and that the Association should enter upon it as soon as possible.

Reorganization Resolution Voted

Approving the principle of reorganization, Standards Council voted unanimously the following resolution:

RESOLVED, that the Standards Council approve the type of "Plan of Organization of the Work of the ASA Standards Council" indicated on the chart attached to the report of the joint committee (MC 1119) as Appendix A.

Certain committees were suggested, as shown in the chart, including electrical, safety, mining, petroleum, chemical, textile, building codes, lumber and wood products, ceramics, mechanical, metals, paper and paper products, and building and construction.

Starting the departmentalization work, Standards Council unanimously

RESOLVED, That the Standards Council hereby authorize the Chairman of the Council and the Committee on Procedure to proceed with the organization of Mechanical and Textile Committees at once and with the organization of other such committees as rapidly as feasible, subject to final approval by the Council of the scope, organization, and personnel of these committees.

Other industrial groups would be allowed to have committees under the reorganization plan, should Standards Council see fit.

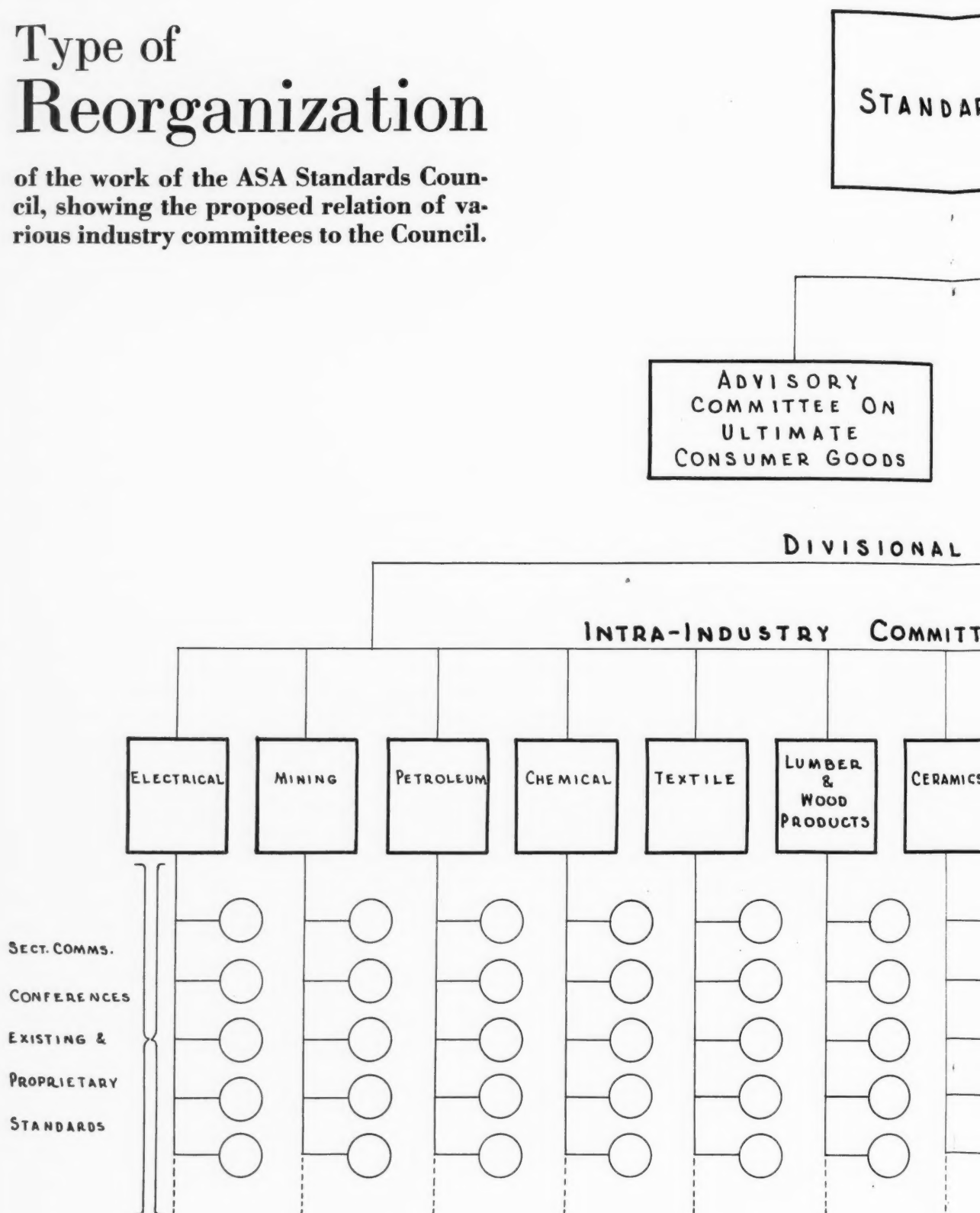
Consumer Goods Committee

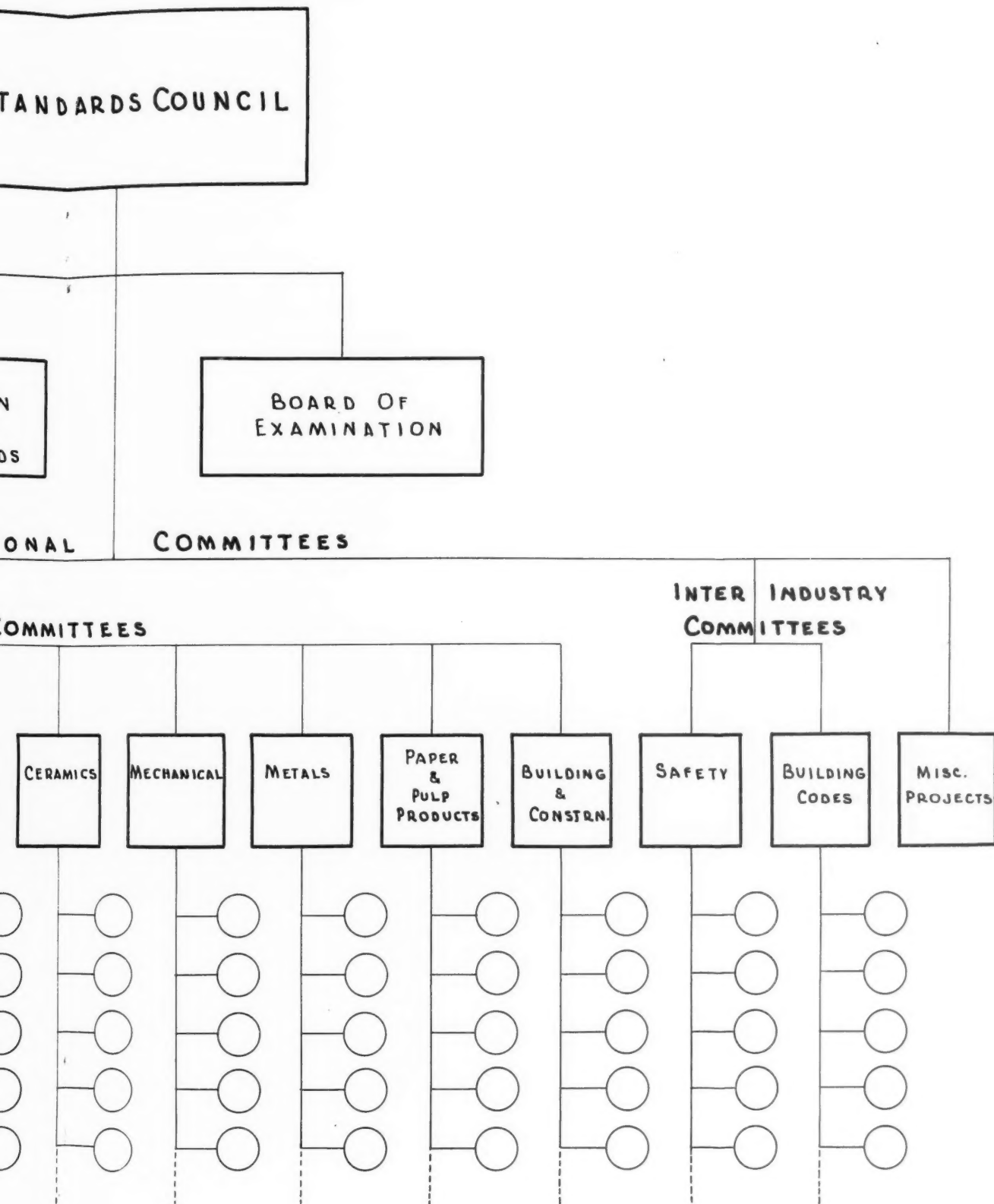
An advisory committee, to be set up on the standardization of Ultimate Consumer Goods, was

(Continued on Page 128)

Type of Reorganization

of the work of the ASA Standards Council, showing the proposed relation of various industry committees to the Council.





(Continued from Page 125)

approved. This committee will represent the point of view of consumer groups as represented through national associations, etc., and distributors and governmental agencies.

Manufacturers and producers will be represented upon the technical committees handling specific projects.

The resolution adopted by Standards Council reads:

RESOLVED, that the Standards Council authorize the Chairman of Standards Council and the Committee on Procedure to proceed at once with the organization of an Advisory Committee on the standardization of ultimate consumer goods, the scope and personnel of which to be approved by Standards Council.

One of the most important functions of this committee will be to advise Standards Council in rounding out the departmentalization of the work of Standards Council from the consumers' and distributors' points of view. It was suggested that a case in point would be the aid of this advisory committee on the organization of a textile committee.

The report was presented by Messrs. Cloyd M. Chapman and Alexander Maxwell, chairmen respectively of the Joint Administrative Committee and the Committee on Procedure. Other members of the former committee are J. C. Irwin, S. L. Nicholson, and Mr. Maxwell, and of the latter are F. M. Farmer, F. O. Hoagland and Mr. Nicholson.

Consumers Will Aid in Writing Standards Under Reorganization

WHEN Standards Council voted to reorganize parts of its structure, it gave an opportunity for ultimate consumers to take a hand in writing standards for "over-the-counter" goods.

An Advisory Committee on Ultimate Consumer Goods to guide the work to be undertaken was authorized by the Council. It will represent every national woman's organization, consumers' groups, and other bodies interested in specifications and labels for ultimate consumer merchandise. (See page 126)

Recently, the Consumers' Advisory Board of the NRA asked the American Standards Association to undertake work on the problem of eliminating the welter of confusion which exists in grade terms, and confusing words which make it impossible for the housewife to know just what grade of goods she is buying.

This work will be a part of the consumers' goods program, it is believed.

Need for Standards

In a letter from Mrs. Emily Newell Blair, Chairman of the Consumers' Advisory Board, read at the meeting by Miss Ruth O'Brien, U. S. Department of Agriculture and a member of the Standards Council, it was shown that great need exists for standards in textiles, garments, electrical equipment, hosiery, shoes, and prefabricated houses.

Consumers Advisory Committee will be appointed to suggest methods of handling wide range specifications for ultimate consumers

"Several sheeting manufacturers, for instance," Miss O'Brien said, "have begun to label the quality of their sheets and pillow cases at the demand of dry goods stores."

"This demand came directly through organized groups of women who want to know the quality of sheets they are buying. Their requests for usable standards went to manufacturers through department stores."

"There are technical problems in even as simple a product as a sheet, but they are by no means insurmountable."

"If manufacturers, dry goods stores, mail-order houses and government experts meet with consumer groups to write simple, easily understood specifications for things the housewife buys it will not be long before stores all over the country can offer merchandise with labels that mean something."

"The American Standards Association has taken a long step forward in realizing that the

women of America often are the final word in buying sheets, clothing, and electrical appliances. Far more difficult standards jobs have been done by this Association in industrial fields, and we can do this, also," she pointed out.

The Government has a specification for sheets used in Government hospitals. Great interest centers in finer grades of sheets and pillow cases among the millions of housewives in the United States, however. This is expected to be one of the earliest undertakings by the Association. Some work has been done in this field by the ASA.

Consumer standards for electrical equipment of all kinds is one of the important needs of the housewife, the Consumers' Advisory Board pointed out in a recent communication.

American Standards for machines and appliances used in industry cover a wide range, but these present standards are too involved to be of use for the ultimate consumer when making purchases in hardware and department stores, Mrs. Blair wrote.

Prefabricated houses offer another field for consumer standards, the Board believes. This development is a relatively new one in the solution of the national housing problem, but it is believed that this type of dwelling lends itself to specifications, which would assure the prospective home owner that he was getting the quality and performance characteristics he was paying for.

Among the associations which will be invited to send representatives to study consumer goods standards under the auspices of the American Standards Association are:

American Home Economics Association
General Federation of Women's Clubs
League of Women Voters
Farm Bureau Federation
American Association of University Women

National Retail Dry Goods Association
Mail Order Association
Limited Price Variety Stores Association
National Retail Hardware Association

National Bureau of Standards
Consumers Division of the National Emergency Council
Consumers Advisory Board, NRA
U. S. Bureau of Home Economics

Issues Revised Recommendation On Truck and Trailer Tires

Simplified Practice Recommendation R103, Industrial Truck and Trailer Solid Tires, is now available in printed form, the Division of Simplified Practice, National Bureau of Standards, announced.

The revised program extends the scope of the original program, which was for industrial truck

National Committee Will Advise ASA on Toxic Dusts and Gases

A national advisory committee on toxic dusts and gases will be appointed by the chairman of the ASA Standards Council, as the result of action taken by the Standards Council at its meeting April 25.

The committee will be composed of experts recommended by the Safety Code Correlating Committee and will be organized to assist the various American Standards Association sectional committees. One of the outstanding problems which affects the work of many of the committees on safety standards is the determination of safe threshold limits of toxic dusts, gases, and fumes. It is on questions such as this that the national advisory committee is expected to be particularly valuable.

tires of the pressed-on type only, to include trailer tires and a new schedule of sizes of cured-on tires.

The schedule for pressed-on tires became effective on June 1, 1934, and the schedule for cured-on tires on November 1, 1934.

Copies of the revised schedule can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for five cents each.

Eight Final Reports Issued By International Association

Eight final reports developed by technical committees of the International Standards Association (ISA) have now been printed. Four of these, on Radial Ball Bearings, Shaft Heights for Machines, Shaft Extensions for Machines and Apparatus, and Shafting Keys, are published in final form.

The other four reports, referring to Rigid Shaft Couplings, Inch-Millimeter Conversion Tables, Paper Sizes, and Thrust Ball Bearings, are still in printed proof form.

Reports of ISA technical committees, developed through cooperation of representatives of national standardizing bodies affiliated with the ISA, are considered to be recommendations to all national standardizing bodies for their acceptance.

Copies of the reports can be borrowed from the American Standards Association Library.

ASA Offers Solution of Building Code Chaos

ASOLUTION of many of the difficulties blocking the way toward greater progress in the construction field will be made possible when the ASA Building Code Correlating Committee is organized and its work gets actively under way. The organization of this new committee was approved by Standards Council at its meeting April 25.

In this program the National Bureau of Standards is cooperating closely with the American Standards Association and will carry special responsibilities in connection with important phases of the work.

For years now, architects, engineers, builders, manufacturers, and others whose work or products go into building construction have complained bitterly about building regulations. Architects have said that their freedom of design has been unnecessarily restricted. Engineers and builders have claimed that obsolete or ill-considered code provisions increased building construction costs without adding any compensating benefits in the way of increased public safety or health. Manufacturers of building materials have repeatedly pointed out that their tested and tried products have been compelled to run a gantlet of conflicting regulations and that promising new materials and methods sometimes died in the struggle for recognition.

Public Demands Good Code

The public, on the other hand, has voiced its disapproval of poor or uncontrolled construction in no uncertain terms following the destruction wrought by earthquakes, tornadoes, fire, time, and other causes. In addition, those who advance money on building construction, those who insure building loans, and those who insure buildings demand sound building regulations as a protection for their investment.

When questions of public health and safety, requirements for countless varieties of building materials, and design and construction problems are blended together to form a building code, it

Important step to coordinate movements for generally acceptable code begun by action of Standards Council in voting for Building Code Correlating Committee

Huge economic advantage to owners, construction industry and other interested groups is seen in American Standards Association program

is obvious that the blending process must be done fairly and concisely. Everyone is entitled to his day in court. Such a premise requires a broad range of representation and a permanent, long range plan for insuring retention of advances made as well as providing machinery for necessary revisions.

Allied Attack Important

With the foregoing factors in mind the question of how to make an allied attack on the code problem was of first importance. Many of the previous approaches to the code problem had been scattered and, in addition, a lack of broadly-organized team work on all sides was said to have neutralized costly but worthwhile advances. A special committee composed of representatives of national organizations having an interest in the entire building code field and private experts was appointed to investigate methods for continuing work on building codes under the procedure of the American Standards Association. The following extract from a supplementary report of this committee sums up its carefully considered views:

"To understand the present situation, it is necessary to go back to the time when work on building codes was undertaken under procedure set up by the Department of Commerce. In 1921, reports of the U. S. Senate Committee on Reconstruction and Production emphasized the importance of building codes as a factor in national

economy. This led to the appointment of the Department of Commerce Building Code Committee by the Secretary of Commerce. The committee consisted of seven outstanding architects and engineers. The technical staff of the committee were members of the National Bureau of Standards staff and the office of the committee was located at the Bureau.

"Statistics, compiled early in 1933, indicated that some 348 municipalities had used the reports of the committee in whole or in part in drafting or revising their building codes. The reports have also been utilized in several state building codes, in a number of regional model codes, and as a guide as to what constitutes good practice by a large number of architects, engineers and builders.

"The Department of Commerce Committee was discontinued for reasons of economy and in line with the principle that agencies outside of the government should have an opportunity to participate more directly in the work. The Department of Commerce and the American Standards Association arranged to cooperate in the future development of building code recommendations. In doing so there was a definite understanding that the advances already made would be sustained and enlarged through the procedure of the ASA.

1,500 Local Codes

"Frequent surveys have brought out the salient facts about the current status of building regulations. We know there are today something like 1500 local codes of all sizes and descriptions in existence in this country and half a dozen state codes. We know that in spite of sustained efforts to bring about scientific treatment of topics in the interest of safety and health these codes still differ widely in their treatment of fundamentals. Without necessarily recommending complete uniformity in building codes, we are merely repeating sentiments often expressed by architects, building officials, engineers and others when we say that a vast amount of work remains to be done in bringing fundamentals up to an acceptable standard. We recognize that this must be done in such a way as not to hamper unduly the work of competent designers, that it must be done with scrupulous fairness to the manufacturers of materials that enter into construction, and that it must recognize the practical difficulties encountered by administrative officials in the exercise of their powers.

"It is true that there are model codes in existence sponsored by organizations of building officials and by insurance interests. While these have made definite contributions toward better requirements, they differ both in method of presentation and actual provisions. There is now no single national organization to which the public can turn for information when confronted by these various recommendations. It is believed that the ASA can provide a broad base for the development of recommendations and will provide an acceptable medium through which conflicting model regulations may be harmonized in the public interest.

Coordination Essential

"In considering procedure, we have before us definite precedents that have operated successfully over a period of years in the several correlating committees of the ASA. Although the building code work is distinct in type from other activities supervised by correlating committees, coordination of a great number of diverse subjects in these other fields has been found essential. Recognition of this fact has resulted in the setting up of the correlating-committee method of handling the work. The necessity for a correlating committee is even more apparent in the

Groups Proposed for Building Code Correlating Committee

These organizations having an interest in the entire building code field have been proposed for the correlating committee. Others will be invited later as well as members-at-large.

American Institute of Architects
 American Municipal Association
 American Public Health Association
 American Society of Civil Engineers
 American Society for Testing Materials
 Associated Factory Mutual Fire Insurance Companies
 Associated General Contractors of America
 Building Officials Conference of America
 Federal Housing Administration
 Forest Products Laboratory, U. S. Department of Agriculture
 International Association of Government Labor Officials
 National Association of Builders' Exchanges
 National Association of Building Owners and Managers
 National Association of Real Estate Boards
 National Board of Fire Underwriters
 National Bureau of Standards
 National Fire Protection Association
 National Safety Council
 Pacific Coast Building Officials Conference
 Supervising Architect's Office, U. S. Treasury Department
 U. S. Public Health Service
 Members-at-large

case of the building code work for the reason that, whereas the work deals with a variety of subjects as in the case of the committees already referred to, it goes further in that the requirements evolved must eventually be combined under one method of treatment. If all these requirements were approximately of the same type, they might conceivably be handled by a sectional committee. They range, however, from administration to working stresses, from ventilation to fire resistance. The combination of these two circumstances—great variety of subjects and necessity of eventually combining them under a common method of treatment—points inevitably toward the wisdom of providing a correlating committee."

To Form Committee

The main correlating committee is to be organized immediately. In general its task will be to consider matters of general interest with respect to building codes; to act as an advisory committee to the American Standards Association; to consider what subjects are appropriate for development in the ASA; to define and limit the scope of projects for which it recommends sponsors; to follow up work in progress in the development of projects; to review the personnel of committees responsible for building code projects to insure their having a representative character; to examine recommendations submitted

British Expect Stimulus Through Building Codes

For the rapid progress of building technique, and especially of standardization in building, it is of vital importance that the system of building regulations should encourage rather than hinder the process.

There can be no question that regulations, in some form or other, have been and must remain essential instruments for securing adequate building standards, more especially in respect of structural safety, sanitary efficiency and the avoidance of undue fire-risks. But there can equally be no question that regulations, by their diversity and obsolescence, have seriously hindered and are still hindering the progress of technique and standardization.

Some tendency to become obsolete is an inevitable feature of all regulation by authority; but, if building regulations were required to conform to a national standard, it would be a comparatively simple matter to alter them to conform to any new or improved method or material whose reliability had been demonstrated.—*From "Slum Clearance and Rehousing," London.*

by sectional committees and to harmonize conflicts between the several recommendations, and to act upon such other matters that may be brought before it with relation to the development of building codes as it may consider within its province, all subject to actions of Standards Council.

Individual projects will be handled by sectional committees, thus affording representation for all those having an interest in one or more phases of building codes, but not in the entire field. The organization of specific sectional committees will, of course, result from the recommendations of the correlating committees as indicated in the duties of that committee.

The breakdown of the component parts of a building code under a coordinated plan has definite technical advantages. It permits use of standards in existence that logically fit into the pattern. Development of the most immediately desirable subjects can take place without waiting for the last word on other subjects of lesser importance, or which require extended investigation

before requirements for them can be developed. With a flexible pattern set up, standards for new types of construction or new materials can be easily and quickly added to it as they are brought out. Another important feature is that the main structure can be made brief or elaborate in line with needs of small municipalities as compared with larger ones, or easily changed as regional variations become necessary.

With recognition of the problems involved, with a rational formula provided that offers a means of solving many of these problems, it remains for the affected parties seriously to apply the formula.

Cast Stone Conference Is Called for May 17

A general conference of producers and users of cast stone, under the auspices of the Division of Commercial Standards of the National Bureau of Standards, will be held at the request of the Cast Stone Institute in the U. S. Chamber of Commerce Building, 1615 H Street, N.W., Washington, D. C., Friday, May 17.

The conference is called for the purpose of adopting as Commercial Standard the proposed standard for colors, texture, and finishes of cast stone revised and approved for trial in 1933. This proposed standard has been considered very satisfactory by the Government departments which are purchasing the increasingly large amounts of cast stone being used by the Government. New colors will undoubtedly be added to the standard.

In connection with the conference, the Cast Stone Institute will have an exhibit showing the various new colors and textures of cast stone now produced by the industry which will give a general view of the present state of the art in commercial cast stone. The exhibit will be shown May 15, 16, and 17 in the U. S. Chamber of Commerce Building.

Copies of the proposed standard and the agenda for the meeting are available either from the American Standards Association or from the National Bureau of Standards.

Taylor Instrument Companies Becomes ASA Company-Member

The Taylor Instrument Companies, Rochester, N. Y., manufacturer of thermometers of all kinds, indicating, recording, and controlling instruments for temperature, pressure, and humidity, and control instruments for industrial uses, has joined the American Standards Association as a Company-Member.

Nearly Half of NRA Codes Have Clauses on Standards

Second study shows increase in trend toward using quality, size, and performance standards in codes written by industries

Two hundred and forty-one of the first 524 Codes, supplemental codes, and amendments approved by the National Recovery Administration, contain standards provisions or mandates that standards be established, an analysis of these documents by the Research and Planning Division shows.

Because of the diversity of industries involved, and the wide differences of viewpoints of code authorities and experts who have developed these documents, exact classification has been impossible.

Some of the "quality standards" provisions, for example, might be termed as "performance requirements," depending upon the point of view of

the analyst. And there is some overlapping of standards, where codes for the raw materials industries in a given field conflict to some degree with codes for manufacturing or processing industries in the same field.

Specific standards for quality, size, weight, performance, and packaging requirements are found in many of the 241 codes which have standards provisions of some sort.

Under the heading of "fair trade practice," many industries have sought to protect honest manufacturers against producers of goods of inferior quality by writing standards into their codes. In many cases this has formed the basis for future grade labeling of products.

This study supplements the first analysis of NRA codes, published exclusively in *INDUSTRIAL STANDARDIZATION*, August, 1934, showing 195 of the first 465 approved codes containing standards provisions.

Specific provisions of the second group of 59 Codes and supplements, of which 46 have standards clauses, follow:

These Standards Provisions Found in Recently Approved Codes

472. Warm Air Register: Code Authority . . . to establish, if found desirable, classifications, dimensional standards, and quality, and/or performance specifications for products of the industry.

477. Public Seating: Code Authority . . . to establish minimum standards of quality of material, workmanship, operation and installation of the products of the industry, provided that nothing herein contained shall be applied to restrict development or advancement of the industry, or to prevent any member from manufacturing any industry products, or perfecting developments or making changes or additions.

478. Secondary Steel Products Warehousing: In order to assist in making effective the reports from the trade, and in eliminating unfair competition, the Code Authority shall, within two weeks after the effective date of the Code, appoint a committee (so constituted as to give producer, consumer, and governmental representation satisfactory to the Administrator) to make a study with a view to the establishment of classifications

and standards of definitions of each class of staple products of the trade, wherever such standards are deemed feasible.

480. Structural Steel & Iron Fabricating: Unfair Practice: Using or substituting any second-hand material or any material inferior in quantity, quality or workmanship to that specified in the contract for the product or work for which such material is used, without the consent of the other party or parties to such contract, or using or substituting any material or any method of fabrication or erection not in accord with any applicable law, rule or regulation of any governmental authority, or, except as may be otherwise required by any such law, rule or regulation, with the standard specifications and code of standard practice of the Institute as at the time in effect.

489. Safety Razor & Safety Razor Blade Mfg.: The members of the industry recognize that the standards of the industry and the distribution of the products of the industry may be best served and promoted by the sale and other distribution of the

products of the industry only by and through recognized and customary wholesale and retail dealers and traders in the products of the industry and other allied and associated products having an established place of business.

No member of the industry shall sell blades "seconds" or resharpened used blades unless they are clearly marked as such on the packages, merchandise cards, and advertising material in connection with which they are to be sold.

490. Imported Date Packing: Code Authority . . . to make, in cooperation with such governmental agency as the Administrator may designate, an investigation of (1) standardization of package sizes and (2) grades and standards for package dates, and report its findings and recommendations to the Administrator on or before May 1, 1935.

491. Imported Green Olive: Code Authority . . . to make studies and investigations for the establishment of classifications, dimensional standards and quality specifications in cooperation with the United States

Department of Agriculture and the National Bureau of Standards.

496. Industry of Collective Mfg. for Door-to-Door Distribution: The use of cereals, chicory, coffee screenings, or other products compounded with coffee, unless containers be plainly and conspicuously labeled to indicate the presence of such fillers and the percentage content of such ingredients other than coffee or chicory: Unfair practice.

The sale, or offering for sale of any liquid household insecticides, for use against flies, below the minimum standard herein defined, or of any Pyrethrum products below the standards defined by the United States Dept. of Agriculture, is unfair competition. The term "minimum standard" as used herein, applied to liquid household insecticides for use against house flies shall mean not less than 60% kill, using the Peet-Grady test.

A tar disinfectant or pine disinfectant or mixture of both, shall bear a label containing a plain, conspicuous, correct and definite statement of the Bacillus typhosis phenol coefficient thereof, as determined by the methods prescribed and promulgated by the Secretary of Agriculture.

495. Steel Joist: All joists shall be designed according to the Steel Joist Institute Standards and the maximum spacing shall not exceed the requirements of the Standard Specifications of the Steel Joist Institute. Also the spacing shall not be greater than that which will give a calculated total carrying capacity at least equal to that required in this section.

500. Processed or Refined Fish Oil: Unfair practice: To fail to apply the standards and specifications which may be established by the Code Authority pursuant to the provisions of Art. VII, Title B, Sec. 1, paragraph (k) hereof.

Code Authority . . . to require that each member of the industry, in selling or promoting the sale of such oil, processed or refined by him, shall classify the product in accordance with said specifications and standards, as and when the Code Authority shall so establish same; and shall comply with the requirements as the Administrator may approve.

502. Upward Acting Door: Code Authority . . . to provide for the study of minimum standards, grades, qualities, workmanship, specifications and for the study of the distribution and installation of products of this industry.

510. Assembled Watch: No member of the industry shall dispose of or permit the disposal of second-hand or rebuilt watches, or watches containing second-hand or rebuilt movements, unless there shall be affixed to each such watch a tag stating that the watch is second-hand or rebuilt and requiring that the tag remain affixed until the watch is sold at retail.

511. Corrugated Rolled-Metal Culvert Pipe: In order to assist in making effective the reports from the industry and in eliminating unfair competition, the Code Authority may appoint a committee so constituted as to give due consumer and governmental representation, to make a study, with a view to the establishment of classifications and standards of dimensions and quality of products of the industry, wherever such standards are deemed feasible.

516. Flavoring Products: The Code Authority shall, within one month after the effective date of the Code, appoint a committee so constituted as to give due consumer and governmental representation, to make a study, with a view to the establishment of classifications and standards

of quality of products of the industry, wherever such standards are deemed feasible.

524. Pickle Packing: Code Authority . . . to appoint within ninety days after the effective date of this code, a committee so constituted as to give consumer and governmental representation satisfactory to the Board, to make a study with a view to the establishment of classifications and standards of quality (grades) and sizes of containers for staple products of the industry wherever such standards or sizes of containers are deemed feasible.

AMENDMENTS

18. Cast Iron Soil Pipe: Amend. 3: The Code Authority shall establish, subject to the approval of the Administrator, uniform specifications for the types and sizes of pipe and fittings in accordance with Federal specifications, and shall cause such tests and inspections to be made from time to time as will adequately safeguard the public interest. When such uniform specifications have been prepared and approved by the Administrator they shall be published to all members of the industry. Thereafter no member of the industry shall knowingly sell or offer to sell any product of the industry without its being plainly marked that it does or does not conform to the above specifications. This provision shall not apply to products manufactured prior to the effective date of these amendments.

23. Underwear & Allied Products: Amend. 3: All standards already formulated in cooperation with the National Bureau of Standards and approved by the industry, or standards which shall be so formulated and approved shall become the standards for the industry. Every manufacturer shall plainly mark with an indelible stamp or firmly-sewn label the sizes or measurements of his product thereon. All merchandise manufactured after the effective date, which falls below the minimum size standards, shall be plainly and visibly marked by an indelible stamp or firmly sewn label "Not Standard Size" and all manufacturers shall stamp or label such goods as herein required, prior to actually putting the merchandise in stock, or in other words, as a part of the manufacturing process.

25. Oil Burner: Amend. 1: The sale or offering for sale of any distillate burner of sleeve type that does not meet the following specifications is unfair competition; provided, however, that where a manufacturer of such equipment desires to manufacture a burner of this type, with other materials than those specified, such manufacturer shall first apply to the Code Authority for permission to do so and he shall at the same time submit proof that the substitutions requested will offer to the consumer protection and service equivalent to that offered by a burner constructed as provided.

Quality of material, workmanship and packing must comply with the Underwriters' Laboratories' requirements as specified in their code of April 1932 and amendments to June 1, 1933.

137. Warm Air Furnace Mfg.: Unfair practice: Publishing firepot measurements which do not represent the true inside diameter of the firepot at the top, unless the manufacturer chooses to publish a measurement taken at some other point, in which event the exact point where such measurement was taken, shall be designated. A tolerance of one per-

cent shall be allowed in the publication of any measurements pursuant to the foregoing.

Publishing a rating in terms of square inches of warm air leader pipe area for any furnace, unless such rating has been computed according to the furnace rating formula contained in the Standard Code published by the National Warm Air Heating and Air Conditioning Association, except that a manufacturer may publish a different rating provided he specifically states in his literature that such rating is not a Standard Code rating.

80. Asbestos: The members of each division of the industry or any subdivision thereof may prepare simplification and standardization specifications and a merchandising plan for each division, or subdivision thereof, as the case may be, incorporating the merchandising policies best calculated to promote fair competition in such division or subdivision. Subject to approval by the Administrator, every such merchandising plan or simplification and standardization specifications, when approved by the sub-code Authority of such division and by either three-fourths of the code members of the division or subdivision, as the case may be, who are present at a meeting expressly called for that purpose, or by a three-fourths vote of the members of the division or subdivision, by written ballot, as the case may be, and filed with the sub-code Authority, shall be binding upon all members of the industry who are included in or come within the division or subdivision to which such merchandising plan or specifications apply. Changes may be made in any such merchandising plan or specifications in the same manner.

79. Novelty Curtains, Draperies, etc.: Amend. 2: The following practices constitute unfair methods of competition for members of the Domestic Decorative Linens Branch of the industry: variance of more than three percent (3%) in either width or length from sizes marked on Domestic Decorative Linens.

219. Bedding Mfg.: Amend. 2: No commodity shall be sold, offered for sale, labelled, advertised or described as down other than the under-coating of a water-fowl, consisting of the light, fluffy filaments grown from one quill point but without any quill shaft, except that a 10% tolerance by weight of small water-fowl feathers only shall be allowed. Feathers and/or down shall not be labelled with percentages or proportions of ingredients unless such feathers and/or down do in fact contain the percentages or proportions named, except that a tolerance of 10% by weight shall be allowed.

Amend. 4: No member of the industry shall use second-hand or previously used material in the manufacture of bedding. No member of the industry shall sell any remade, renovated or repaired second-hand bedding. Remake, renovate or repair work on bedding is permitted only when a member of the industry does such work for the owner and user of the bedding and re-delivers it direct to such owner-user, but if in such work added material is needed, such added material shall not contain any previously used material (Amend. 3.)

No member of the industry shall make or sell a mattress, pillow, box spring, glider, or studio couch to which is not securely sewn by at least one edge a cloth or cloth-backed tag at least 2 x 3 inches in size; and upon the face of said tag shall be legibly stamped or printed in English (a) the materials used to fill such bedding; (b) the name and address of

Code Administrative Orders Dealing with Standards

Order No.	Industry	
40-12	Elec. Storage Battery—Interpretation as to "repaired" batteries.	244H-10 Roofing & Sheet Metal Contracting—Approving Standard Code Regulations for installation of heating systems.
108-14	Motor Fire Apparatus—Approving standard equipment specifications.	291-5 Wood Cased Lead Pencil—Approving schedule for simplification of varieties, and standardization of specifications of products, and their packaging.
108-15	Motor Fire Apparatus—Same (for motor pick-up street sweepers).	309-9 Solid Braided Cord—Interpretation approving proposed regulation as to labeling of products to show weight, length, etc.
146-5	Excelsior & Products—Approving Grade Standards & Classifications of Products.	342-6 Sanitary & Waterproofing Specialties—Authorizing Code Authority to issue to each member a number for marking seconds or faulty merchandise.
177-10	Silverware Mfg.—Approving, and providing for publicity as to quality standards for plated and hotel flatware.	
178-7	Watch Case Mfg.—Requiring that	

the maker or vendor of the bedding. When bedding is remade, renovated or repaired as authorized in Section I the above tag shall in addition be legibly stamped or printed on the face thereof with the word "Remade" or "Renovated" in letters at least one-eighth inch high. In the case of metal beds, springs, cots or cribs, the tag shall be securely attached thereto. Nothing likely to mislead shall appear on said tag and it shall contain all statements required hereunder, and shall be sewn to the outside covering of every article of such bedding before the filling is inserted. The name "felt" shall not be used unless the material described has been carded in layers by a garnett or carding machine. The words "Second Hand" in bold faced letters not less than three quarters of an inch high and wide shall be legibly and indelibly stenciled on top and bottom of every second hand pillow, mattress, pad, box spring, studio couch or glider, and on top of the head and foot end angle rails of every second-hand metal bed, spring, cot or crib, if such bedding has been used but not remade, renovated or repaired.

235. Textile Processing: Amend. 3: Code Authority . . . to appoint, within six weeks after the effective date, a committee so constituted as to give consumer and governmental representation satisfactory to the Administrator, to make a study with a view to the establishment of classifications, nomenclature and standards of quality (grades) of staple products and services of the industry wherever such standards are deemed feasible. The findings and recommendations of this committee shall be submitted to the Administrator, within six months after such hearings and investigations as he may designate, and upon approval by him shall be made a part of this Code and be binding upon every member of the industry.

267. Used Textile Bag: Amend. 1: Code Authority . . . to prepare standard classifications and specifications for the products of the industry, which, on approval of the Administrator, shall be binding on all members of the industry in the purchase and sale of the products of the industry.

287. Graphic Arts: Amend. 8: No establishment shall use or permit the use of die stamping or embossing, photo-process work, or machine engraving for script or other lettering in the preparation of any steel engraved security. . . . All steel engraved vignettes shall be hand line engraved without the use of any photo-process work.

298. Wiping Cloth: Amend. 1: Code Authority . . . To prepare standard, domestic and imported classifications and specifications for the products of the industry, which on approval of the Administrator, shall be binding on all members of the industry in the purchase and sale of the products of the industry.

446. Canning: Amend. 1: The industry shall designate a committee whose membership shall be subject to the approval of the Administrator and who shall cooperate with the Administrator in the formulation of standards of quality for products of the industry and to make recommendations to the Administrator within ninety days for the inclusion in said Code of provisions with respect to such standards and labeling requirements.

72. Supp. 2: Paper Box Machinery: In order to assist in making effective the reports from the industry and in eliminating unfair competition, the Code Authority shall within one month from the effective date of this Supplementary Code give due consideration to the establishment of a committee so constituted as to give due consumer and governmental

representation, to make a study with a view to the establishment of classifications and standards of dimension and/or quality and/or performance of products of the industry wherever such classifications and/or standards are deemed advisable. Proposed modifications and amendments based on such findings and recommendations of this committee may, within one year, be submitted to the Administrator and after such hearings as he may prescribe and upon approval shall become a part of this Supplementary Code and be binding upon every member of the industry. Such committee shall have the power to cooperate with any other such standardization committee.

84. Supp. 37: Artistic Lighting Equipment Mfg.: The Supplementary Code Authority shall make studies for the establishment of classifications, dimensional standards and quality and/or performance specifications for products of the industry, in cooperation with some Federal Government Agency, preferably the Bureau of Standards of the United States Department of Commerce with the view to their recommendation within one year from effective date of this Supplementary Code for adoption by the industry by a sixty percent numerical vote of the members of the industry; and thereafter upon the approval by the Administrator all members of the industry shall follow such standards. Failure to follow the standards set up by the Supplementary Code Authority, so approved by the members of the industry will be an unfair method of competition and a violation of this Supplementary Code.

Supp. 40: Cut Tack, Wire Tack, & Small Staple Mfg.: The Supplementary Code Authority shall make studies for the establishment of classification, dimensional standards and count per pound for the products of the industry, in cooperation with

NRA Codes Include Product Guarantees

Product guarantee provisions are found in eighty-six of the first 521 approved codes, 166 supplemental codes, and 411 amendments, according to a study released by the Research and Planning Division of the NRA.

The codes with product guarantee provisions follow:

Leather Industry, Oil Burners, Gasoline Pump Mfg., Laundry & Dry Cleaning Machinery Mfg., Boilers, Electric Storage & Wet Primary Battery Industry, Ice Industry, Steel Tubular & Firebox Boilers, Rock Crusher Mfg., Steel Castings, Petroleum Equipment, Washing & Ironing Machinery, Fire Extinguishing Appliances, Cleaning & Dyeing Trade, Shovel, Dragline & Crane, Scientific Apparatus, Cement, Vitrified Clay Sewer Pipe, Waterproofing, Dampproofing, etc., Valve & Fittings Mfg., Metal Tank, Rubber Mfg., Stone Finishing Machinery, Non-Ferrous Foundry, Refractories Industry, Grinding Wheels, Rolling Steel Doors, Rubber Tires, Silverware, Plumbing Fixtures, Dental Laboratory, Bedding Mfg., Envelope Industry, Construction Machinery Distributing, Venetian Blind, Fan & Blower, Marine Auxiliary Machinery, Athletic Goods, Printing Equipment, Unit Heaters & Ventilators, Steam-Heating Equipment, Air Valve, Sewing Machine, Retail Tire & Battery Trade, Paper Makers' Felt, Mechanical Packing, Lead Industry, Candy Mfg., Trailer Mfg., Cold Storage Doors, Dental Goods & Equipment, Cotton Ginning Machinery, Imported Green Olive, Industrial Oil Burners, and Artificial Limbs.

SUPPLEMENTS

Refrigeration, Paper Box Machinery, Metallic Wall Structures, Hand Chain Hoists, Hack Saw Blades, Power & Gang Lawn Mowers, Wrench Mfg., Snap Fasteners, Metal Sign & Display, Wire Rope & Strand, Lift Truck & Portable Elevator, Wire & Iron Fence, Pulp & Paper Wire Cloth, Tubular Split & Outside Prong Rivet, Liquid Fuel Appliance, Fire Resistive Safe, Auto Hot-Water Heater, Leaf Springs, Radio Wholesaling, Furriers Supplies Trade, Athletic Goods Distributing, Roofing & Sheet Metal Contracting, Woodworking Machinery, Beater & Jordan & Allied Equipment, Contractors Pump, Hoisting Engines, Power Transmission, Conveyor & Material Preparation Equipment, Multiple V-Belt Drive, Refrigerating Machinery and Concrete Mixer Mfg.

some Federal Government agency, preferably the Bureau of Standards of the United States Department of Commerce, with a view to their recommendation for adoption by the industry and such standards when approved by a majority vote of the members of the industry shall become the standards of the industry, subject to the approval of the Administrator; and thereafter all members of the industry shall follow such standards. Failure to follow the standards so established and approved will be an unfair method of competition and a violation of this Supplementary Code. Provided, however, that exemptions from such standards may be granted by the Administrator after consultation with the Supplementary Code Authority.

Supp. 43: Vitreous Enameled Ware Mfg.: Code Authority . . . to appoint, within one month after the effective date of this Supplementary Code, a committee so constituted as to give

due consumer and governmental representation, to make a study, with a view to the establishment of classifications and standards of quality and the labeling of products of the industry wherever such standards are deemed feasible. The findings and recommendations of this committee shall be submitted to the Administrator, within one year after the effective date of this Supplementary Code, and after such hearings as he may designate, and upon approval by him shall be made a part of this Supplementary Code and be binding upon every member.

The term "kiln run ware" as used herein, is defined to mean Vitreous Enameled Ware as it is removed from the kiln after burning, without such inspection as will determine which articles are of first grade quality and which are of second grade quality, the resulting mixture of first and second grade articles being packed and sold as "kiln run ware."

Supp. 46: Electro Plating & Metal Polishing & Metal Finishing: Code Authority . . . to appoint within 90 days after the effective date of this Supplementary Code a committee so constituted as to give consumer and governmental representation satisfactory to the Administrator, to make a study with a view to the establishment of classifications and standards of size (including thickness of deposit) and quality (grades) of staple products and services of the industry wherever such standards are deemed feasible. The findings and recommendations of this committee shall be submitted to the industry and to the Administrator, within one year after the effective date of this Supplementary Code. If a majority of the members of the industry approve of the findings and recommendations, and after such hearings and investigations as the Administrator may designate, and upon approval by the Administrator, such findings and recommendations shall be made a part of this Supplementary Code and shall be binding upon every member of the industry.

Supp. 47: Pipe Tool Mfg.: Code Authority . . . to appoint a committee, with consumer and governmental representatives designated by the Administrator, to make a study of dimensional and quality standards to be applied to the products manufactured by this industry. Such committee shall report within at least six months to the Supplementary Code Authority, and if the recommendations of said committee are approved by the Supplementary Code Authority and the Administrator, the standards thus established shall be adhered to by all members of this industry in manufacturing the products of this industry.

Supp. 50: Vise Mfg.: Same as #47 above.

Supp. 52: Tubular Split & Outside Pronged Rivet Mfg.: Code Authority . . . to study, in cooperation with such recognized organization as the Bureau of Standards, questions of devising adequate standards of dimensions and quality for the products of the industry, with the view to their recommendation to and adoption by the industry.

Supp. 53: Liquid Fuel Appliance Mfg.: No member of the industry shall sell or offer for sale any distillate burner of sleeve type that does not meet the following specifications: provided, however, that where a manufacturer of such equipment desires to manufacture a burner of this type, with other materials than those specified, or desires to use a different combination of parts than those specified, such manufacturer shall first apply to the Code Authority for permission to do so and he shall at the same time submit proof that the substitutions requested will offer to the consumer protection and service equivalent to that offered by a burner constructed as herein provided. The Code Authority will pass upon this petition. If denied, the applicant may apply to the Code Authority for permission to do so and he shall at the same time submit proof that the substitutions requested will offer to the consumer protection and service equivalent to that offered by a burner constructed as herein provided. The Code Authority will pass upon this petition. If denied, the applicant may apply to the Administrator for permission and the decision of the Administrator shall be final. (For detailed specifications, see Supplementary Code, V, O.)

201. Supp. 13: Athletic Goods Distributing Trade: In order to assist in

making effective the reports from the Trade in eliminating unfair competition, the Divisional Code Authority within one month after the effective date of the Supplemental Code shall appoint a Committee so constituted as to give producer, consumer and governmental representation, to make a study with a view to the establishment of classification of standard of quality of products of the Trade, wherever such standards are deemed feasible; the findings and recommendations of this Committee shall within one year be submitted to the Administrator and after such hearings and investigations as he may designate and upon approval by him, shall be made a part of this Supplemental Code and be binding upon every member.

No member of the Trade shall stamp the names "Official," "Official League," "National League," or "American League," on other than the manufacturer's finest quality baseballs, made of the best quality wool yarn containing at least 95% wool.

Supp. 14: Woolens & Trimmings Distributing Trade: All woolen lengths based on a fifty-six inch width or over, on double width six-quarters goods and on a twenty-eight inch width or over on single width three-quarters goods, must be measured not to exceed thirty-seven inches to the yard. All linings shall be measured not to exceed thirty-six inches to the yard. No claim may be allowed for short measure for any length delivered measuring thirty-six inches to the yard before being shrunk. No allowances for short measure shall

be made after the goods are cut by the purchaser.

Supp. 19: Charcoal & Package Fuel Distributing Trade: Same as #13 (VI, 4) Unfair Practice: To deliver by weight or measure less fuel than is required by the standard, uniform, and customary bags, packages and containers, or to deliver a mixture of sizes with intent to deceive the consumer.

244. Supp. 13: Kalamein Industry: Code Authority . . . to make studies and investigations for the establishment of classifications, dimensional standards, and quality specifications for products of this Division, in cooperation with a Federal Governmental agency preferably with the Bureau of Standards of the United States Department of Commerce, with the view to their recommendation for adoption by the industry within one year from the effective date of this Code. Failure to follow such standards, when adopted and approved by the Administrator, except when in conflict with the specification of the awarding authority, will constitute a violation of this Chapter.

Supp. 15: Terrazzo & Mosaic Contracting: To establish with the approval of the Administrator, classifications for terrazzo and mosaic materials and work, standard grades and quality, and specifications for the materials and services of the Division, in order to assist in making effective the reports from the members of this Division and in eliminating unfair competition.

244. Supp. 16: Heating, Piping & Air Conditioning Contractors: To protect the public against inadequate

installations, members of this Division shall install all work in accordance with the applicable municipal or state law then existing and, where not conflicting therewith, in accordance with the published Engineering Standards of the Association, except where otherwise required by definitely prepared plans and written specifications furnished by the owner or his authorized representative. When the welding process is used the work shall be done in accordance with the Welding Standards and Specifications of the Association. The standards of the Association mentioned in this paragraph shall not be binding upon members of the industry until approved by the Administrator.

308. Supp. 7: New England Fish & Shellfish Preparing & Wholesaling: Code Authority . . . to appoint within one month after the effective date of this divisional code a committee from the New England industry to work in collaboration with some appropriate Federal agency or agencies and the Code Authority of said national code toward establishing classifications and standards of quality for products of the New England industry. The findings and recommendations of said committee shall be submitted to the Administrator within sixty days after the effective date of this divisional code.

347. Supp. 40: Diesel Engine Mfg.: The Code Authority shall study in cooperation with such recognized Governmental agencies as the Bureau of Standards classifications, specifications, and standards of quality, with a view to their recommendation to and adoption by the Subdivision.

Boundaries Between Coal Groups Re-Aligned in Committee Proposal

The Sectional Committee on Classification of Coal held an important meeting in Pittsburgh on April 1, under the chairmanship of A. C. Fieldner, Chief Engineer, Experiment Stations Division, U. S. Bureau of Mines.

Following recommendations of the Technical Committee on Coal Classification, it was voted to submit to letter ballot of the sectional committee a proposal to change the boundary line between the low-volatile bituminous coal group and the medium-volatile bituminous coal group. As given in Table I of the Tentative Specifications for Classification of Coal by Rank (A.S.T.M. D 338-34 T), the boundary line was set at 77 per cent fixed carbon (23 per cent volatile matter) and the proposal now before the committee recommends 78 per cent fixed carbon (22 per cent volatile matter).

J. D. Battle, Executive Secretary of the National Coal Association, was elected secretary of the committee, succeeding C. B. Huntress. T. W. Harris, Jr., representing the National Association of Purchasing Agents, was elected as a member

of the Executive Committee to succeed W. H. Cunningham, resigned.

At a meeting of the Executive Committee, held immediately following the meeting of the sectional committee, work now under way was discussed. Papers for a proposed Coal Classification Symposium to be held by the Coal Division of the American Institute of Mining and Metallurgical Engineers in February, 1936, were considered. A suggestion that the term "medium volatile" as applied to certain groups of bituminous coal be dropped was not accepted.

Boundary Line Work Under Way

Progress reports of activities of several subcommittees indicated that Subcommittee V on boundary lines had completed its assignment, and Subcommittee VI was well along in the preparation of charts showing the relative importance of properties affecting the selection of coal for various uses.

In Subcommittee VII a proposed tentative method of test for screen analysis of coal has

been prepared and is now out to letter ballot of A.S.T.M. Committee D-5 on Coal and Coke. Proposals for describing screen sizes of coal based on tolerances of oversize and undersize are now being formulated and may be ready for consideration at the fall meeting of the technical committee. Subcommittee VII is also interested in the method of test for friability of coal now under development in a subcommittee of A.S.T.M. Committee D-5.

USNC Names Officers And Executive Council

C. H. Sharp, White Plains, New York, was unanimously re-elected President of the U. S. National Committee of the International Electrotechnical Commission, at its recent meeting.

C. R. Harte, the Connecticut Company, New Haven, and H. S. Osborne, American Telephone and Telegraph Company, New York, were re-elected vice-presidents, and P. G. Agnew, secretary, American Standards Association, was re-elected secretary of the Committee.

Members of the Executive Council are:

- L. F. Adams, representing the National Electrical Manufacturers Association
- H. N. Davis, representing the National Electrical Manufacturers Association
- F. D. Newbury, representing the American Institute of Electrical Engineers
- R. H. Tapscott, representing the Electric Light and Power Group
- E. C. Crittenden, Member at Large
- S. Withington, Member at Large

C. H. Sharp, C. R. Harte, and H. S. Osborne are ex-officio members of the Executive Council.

Insulator Committee Is Revising Standard on Insulator Tests

At a meeting of the Sectional Committee on Insulators for Electric Power Lines, held February 27, plans were made for a comprehensive re-organization of the committee's work in such a way as to undertake a broad program for the standardization of insulators.

It was decided to completely revise the existing American Standard on Insulator Tests (C29a-1930) (A.I.E.E. No. 41). Four groups are being set up, each in charge of a subcommittee to standardize insulators of different types, as follows:

- Group 1. Pin Type Insulators (two subdivisions)

- Group 2. Guy, Deadend (except suspension type), and Rack Insulators
- Group 3. Switch and Bus Insulators
- Group 4. Suspension Type Insulators.

Each group will consider the feasibility of standardizing dimensions, ratings, and classifications, and will provide its standard with acceptance tests suitable for that particular class of material.

J. A. Brundige, chairman of the sectional committee, appointed the following subcommittee members:

Group 1—E. H. Fritz, Westinghouse Electric & Manufacturing Company, *temporary chairman*; G. W. Lapp, Lapp Insulator Company, Inc.; H. S. Phelps, Philadelphia Electric Company; H. H. Schoolfield, Chief Engineer, Pacific Power and Light Company.

Group 2—D. H. Osborne, Porcelain Insulator Corporation, *temporary chairman*; G. I. Gilchrist, Westinghouse Electric & Mfg. Co.; W. G. Kelley, Commonwealth Edison Company; T. H. Haines, Edison Electric Illuminating Co.

Group 3—Philip Sporn, American Gas & Electric Co., *temporary chairman*; G. I. Wright, Reading Company, Philadelphia; K. A. Hawley, Locke Insulator Corp.; one to be named from the Power Switch Gear Sectional Committee.

Group 4—W. H. Burleson, Ohio Brass Company, *temporary chairman*; H. B. Vincent, R. Thomas & Sons Company; R. R. Cowles, Pacific Gas & Electric Co.; J. A. Brundige, Electric Bond & Share Co.

Standards Would Clarify Paper-Testing Results

More standards to promote the use of a common language and better understanding in the paper industry were recommended by F. T. Carson, National Bureau of Standards, in an address before the Delaware Valley Section of the Technical Association of the Pulp and Paper Industry, March 22.

An uncoordinated system of testing, vague definitions, and loose terminology have resulted from differences in viewpoint between manufacturer and consumer, Mr. Carson said.

Mr. Carson outlined the two-fold scope of paper testing: in manufacturing control, and in appraising the finished product. The essential differences in viewpoint of the manufacturer and consumer as well as the factors in common were outlined. The requirements made by each group for testing instruments is different, said Mr. Carson, and hence the need for an extension of standards in the interest of a common language and better understanding.

Cleaners Cooperate on Grades for Dry-Cleaning

Specifications for two grades of dry-cleaning have been adopted by the Pennsylvania Association of Dyers and Cleaners. "Pennsylvania A Grade" and "Pennsylvania Minimum Standard Grade," based on the test methods recommended for the whole industry by the NRA code committee, have been set up. The Pennsylvania cleaners entered into this arrangement on a voluntary basis.

The specifications include provisions for marking, processing, packaging, and test and scoring methods.

University Makes Tests

Dr. Pauline Beery Mack, Pennsylvania State College, worked out the testing method, and test pieces which have been soiled and spotted in the standard manner prescribed in the Pennsylvania standards can be secured from her. Her laboratory, which is equipped with the necessary light-testing apparatus and with a machine to test the breaking strength of the fabric, will make tests of the pieces when they have been cleaned, for a small laboratory fee.

A system for testing cleaning in Indianapolis has been worked out by the Indianapolis Consumer Council. Through the cooperation of cleaners and dyers of Indianapolis, the Consumer Council, and Butler University, at least ten cleaning and dyeing establishments will supply funds for paying the laboratory charges for testing and the cleaning charges on test garments.

A test wool garment, which will come into the plant as if it comes from an ordinary customer so that the plant cannot give it special treatment, will be sent to each cooperating plant each week. The garment used for testing is to have been soiled and spotted in a specific manner and, in addition, a standard soiled swatch is to be concealed under the lining of the garment.

When the garment is cleaned the swatch will be sent to Dr. Mack's laboratory at Pennsylvania State College for testing and the Home Economics Department of Butler University will examine the garment for the other factors to be graded in scoring the quality of the plant's work. Similar tests are to be made with garments other than wool, although only a wool swatch is to be sent for special testing to the Pennsylvania State College laboratory. When tests have been made, the plant is to receive a report of the quality of its work.

This Indianapolis plan is to be administered by committees drawn from the cleaners and dyers, the Consumers Council, and the Home Economics Department of Butler University. Such a com-

ASA Approves Fire Protection Code For Blower and Exhaust Systems

A fire protection code for Blower and Exhaust Systems covering heating and ventilating, removal of, flammable vapors, and conveying of dust, stock, and refuse, prepared by the National Fire Protection Association's Committee on Blower Systems for Heating, Ventilating, Stock, and Refuse Conveying, has been given American Standards Association approval.

The code is available from the American Standards Association or from the National Fire Protection Association, 60 Battery-march Street, Boston, at ten cents a copy. ASA Members ordering copies through the ASA office are entitled to a 20 per cent discount.

mittee is to be responsible for preparing the test samples and for agreeing on definitions of proper standards for finishing and repairing. In its preliminary form, the Indianapolis plan does not provide for a specific labeling method. The Indianapolis Committee has been in close touch with the Pennsylvania group, however, and is working out standards and labeling methods which closely follow the Pennsylvania experience.

The Pennsylvania standards are given in full in *Consumer Notes*, published for the County Consumer Councils by the Consumers Division of the National Emergency Council, April 2, 1935.

Graham Motor Employees To Aid Highway Safety

Believing that the automobile industry can accomplish much in a public campaign of safety education to reduce the increasing toll of traffic accidents throughout the nation, Robert C. Graham, executive vice-president of the Graham Paige Motors Corporation, has asked all Graham dealers and employees to cooperate in a comprehensive safety-first program.

Mr. Graham declared that if the industry, with its millions of workers and far-reaching facilities for personally contacting the automobile public, united in a concerted drive to eliminate the careless or untrained driver, the effort would save thousands of lives and injuries this year besides millions of dollars in unnecessary property damage.

23 State Legislatures Vote On Safety Glass Bills in 1935

Bills requiring the use of safety glass in motor vehicles have been introduced in 23 states during the 1935 legislative period. The Governors of Delaware, Indiana, North Dakota, West Virginia, and Missouri, have signed safety glass laws this year. Safety glass legislation in Ohio and Maryland is awaiting the signatures of the respective Governors.

Bills have passed one or the other legislative houses in Oklahoma and California, and have been approved by the committees of both houses of California, Kansas, Oklahoma, and Texas.

Bills requiring the use of safety glass have been introduced in Arkansas, Connecticut, Colorado, Idaho, Illinois, Massachusetts, New Hampshire, North Carolina, South Carolina, Oregon, Tennessee, Utah, and Wisconsin, but no definite action has been taken during this session. There is a strong sentiment for the passage of these bills in at least seven of these thirteen states, it is reported.

The senates of Montana and Washington passed safety glass bills, but the lower houses in each case were unable to get to the vote, because of adjournment. Of the 23 states where such legislation was introduced, only Montana voted against safety glass laws. Nearly 12,000,000 motor vehicles are registered in the states which introduced safety glass legislation during this year.

Bankers Ask Uniform Practice on Checks

The Division of Simplified Practice of the National Bureau of Standards has announced that Simplified Practice Recommendation R50, Bank Checks, Notes, Drafts, and Similar Instruments, has again been reaffirmed, without change, by the standing committee in charge of the regular review.

This schedule, which recommends that there be adopted uniform sizes and arrangements of subject matter on bank checks, notes, drafts, and similar instruments, was first made effective on

March 1, 1926, and was reaffirmed without change in 1927, 1929, and 1931.

The announcement was accompanied by a plea for universal adherence by Ronald Ransom, chairman of the Standing Committee, who said:

"The committee of the American Bankers Association having this matter in charge wishes again to urge universal adherence to the recommendation. Bank checks are the chief medium of exchange in the United States and represent the popular vehicle through which 96 per cent of all our commercial and business transactions is conveyed.

Standards Save Expense

"The daily liquidation of this enormous volume of credit exchange constitutes nine-tenths of internal banking expense. Much of this expense, running well into the millions, can be saved through the universal adoption of standard sizes of checks and drafts, and uniform placement of essential data on their faces.

"During the past nine years, since the standard recommendations were approved, the American Bankers Association, the United States Department of Commerce, and other agencies have conducted a vigorous campaign for the universal adoption and use of standard size checks, drafts, and so forth, with the result that a subsequent survey along this line shows that gratifying progress has been made, and that over 85 per cent of all checks and drafts are of standard size.

"Some of the specific advantages which follow the adoption of this simplification program are:

"Saves paper by cutting from standard size stock without waste;

"Eliminates misunderstandings and inconvenience;

"Saves time in filing, finding, and handling while being checked;

"Eliminates wasted filing space through uniformity of size."

Printed copies of the recommendation may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at five cents each.

Underwriters' Lists of Inspected Appliances

The Supplement to the July, 1934, List of Inspected Fire Protection Appliances and to the List of Inspected Gas, Oil, and Miscellaneous Appliances has been published by Underwriters' Laboratories.

Copies are available from the Underwriters' Laboratories, 207 E. Ohio Street, Chicago.

Newly Published Standards Available from ASA Office

Recently approved American Standards which have been published and can now be obtained from the American Standards Association office are:

Binders Board for Bookbinding and Other Purposes (Commercial Standard CS50-34) ASA CS50-34	5 cents
Building Exits Code A9-1935	75 "
Chip Board, Laminated Chip Board, and Miscellaneous Boards for Bookbinding Purposes (Commercial Standard CS49-34) ASA CS49-34	5 "
Methods of Testing Molded Materials Used for Electrical Insulation (A.S.T.M. D48-33) ASA C59.1-1935	25 "
Methods of Testing Electrical Insulating Oils (A.S.T.M. D117-33) ASA C-59.2-1935	25 "
Methods of Test for Resistivity of Insulating Materials (A.S.T.M. D257-33) ASA C59.3-1935	25 "
Regulations for the Installation of Blower and Exhaust Systems Z33-1935	10 "
Specifications for 750-Volt Direct Suspension Overhead Trolley Contact Construction C15-1935	25 "
Specifications for Rubber Matting for Use Around Electrical Apparatus or Circuits not Exceeding 3,000 Volts to Ground (A.S.T.M. D178-24) ASA C59.4-1935	25 "

Company Members of the American Standards Association are entitled to one free copy of each of these standards. For additional copies, ASA Company Members and Member-Bodies are entitled to 20 per cent discount on any number of copies ordered.

German Rules for Rating and Testing Electrical Machinery

The 1934 edition of the *Vorschriftenbuch*, published by the German institution of electrical engineers, contains the German rules for the rating

and testing of electrical machinery and apparatus approved by Deutscher Normenausschuss, the German national standardizing body.

Dimensional standards, which are not included in the *Vorschriftenbuch*, are approved separately by the German standardizing body and are published as DIN standards.

The *Vorschriftenbuch* can be borrowed from the American Standards Association Library, or can be ordered through the ASA Library at \$6.00 a copy.

Accident Prevention is Aim Of Pontiac Motor Factory

Pontiac Motor Company is inaugurating an accident prevention campaign this month with two trophies to be awarded to the factory groups making the best safety record following the close of the contest December 31.

All departments have been placed in 12 groups for the purpose of equalizing the accident hazard. The trophies will be awarded:

(1) To the group showing the greatest improvement in accident prevention for the last nine months of 1935 over like period of 1934.

(2) To the group with the highest standing in accident prevention.

The following formulae will be employed to compute group standings which will be issued in the form of monthly reports:

$$\frac{\text{Number of accidents} \times 1,000,000}{\text{Number of hours worked}} = \text{Frequency of accidents.}$$

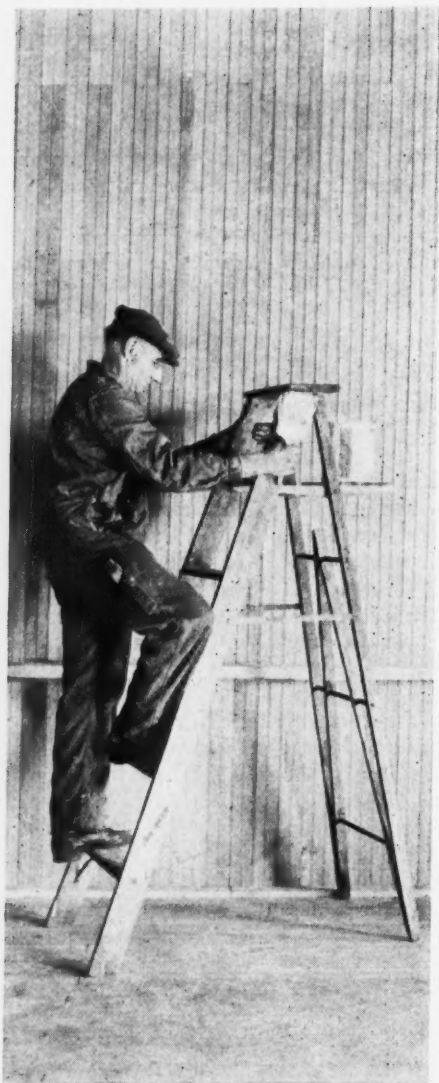
$$\frac{\text{Number of days lost} \times 1000}{\text{Number of hours worked}} = \text{Severity of accidents for the group.}$$

For the purpose of the Pontiac accident-prevention campaign the competitive standings are established by multiplying the frequency rating by the severity rating.

Revised Transformer Standard Considered by ASA Committee

The American Institute of Electrical Engineers has submitted a revision of its standard No. 14 on Instrument Transformers, American Standard C22-1925, to the American Standards Association for consideration.

The Electrical Standards Committee has referred the proposed revision to the sectional committee on Transformers, where it will receive consideration by the subcommittee on instrument transformers before it is submitted to the American Standards Association for approval as American Standard.



Courtesy Aetna Life Insurance Co.

**Up-To-Date
Requirements
for
LADDERS
*Are Now Completed***

Ladder users and manufacturers, the
lumber industry, state regulatory
bodies, insurance interests, engineer-
ing and safety societies, and the
Federal Government

Co-Operated

To make these new American Stand-
ard specifications for ladders safe and
practical

**American Standard Safety Code for
the Construction, Care, and Use of**

Price, 25 cents

LADDERS

Members of the American Standards Association are entitled to 20 per cent discount.

Please deduct your discount when paying for standards.

American Standards Association

29 West 39th Street

New York